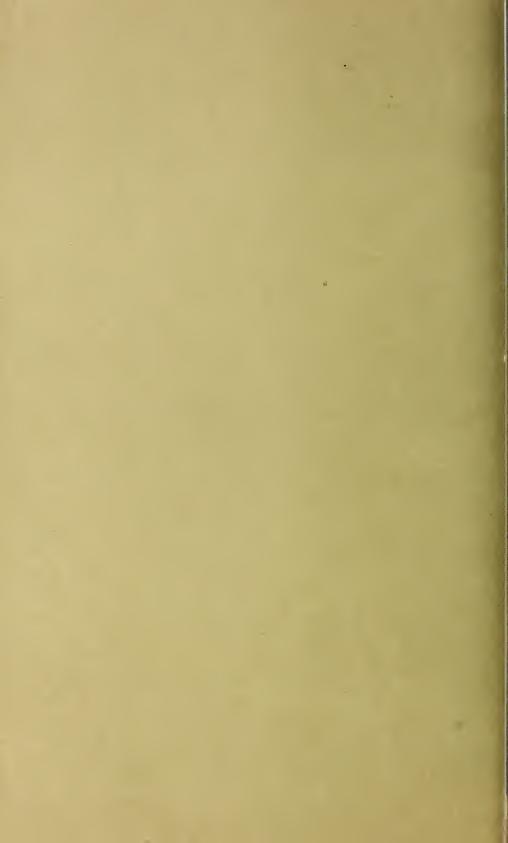
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Diets of Families in the Open Country

... a Georgia and an Ohio County Summer 1945



U. S. DEPARTMENT OF AGRICULTURE

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Diets of Families in the Open Country A Georgia and an Ohio County Summer 1945

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FOREWORD

This report is concerned with the nutritional quality of diets of farm and nonfarm families living in the open country in a county in central Georgia and another in southern Ohio. Information for the report was collected in a survey made in the early summer of 1945; the data on food consumption and diet quality represent that season but the data on income refer to a 12-month period between January 1, 1944, and June 30, 1945.

The study on which the report is based was planned and conducted under the direction of Margaret G. Reid, former Head of the Family Economics Division (now with the University of Illinois).

Appreciation is expressed for the valuable assistance given by the two staff members, Lillian Fincher and Marie Linck, who were in charge of collection of data in the counties, and to the local women who served as interviewers under them. Thanks are extended to Evelyn Grossman and Mary Ann Moss, also staff members, for their help in the preparation of the report.

We are indebted to the Statistical Laboratory of Iowa State College and the Bureau of Agricultural Economics of the United States Department of Agriculture for their assistance in drawing the samples for the two counties.

Acknowledgment is made to the Extension Service, Farmers Home Administration (formerly the Farm Security Administration), and the Office of Experiment Stations and to their representatives who rendered valuable aid to the staff members in charge of collection in the two counties. Special mention is due Ophelia Smith, Home Demonstration Agent in the Georgia county, and Mary E. Miller, Home Demonstration Agent in the Ohio county, for their efforts in behalf of the survey and their many courtesies to the field staff.

HAZEL K. STIEBELING, Chief.

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INTRODUCTION

National dietary surveys that give a broad picture of the quality of diets for a cross section of families in the United States rarely tell how well fed are small homogeneous segments of the population. To give the broad coverage and the details by regions, States, cities, counties, and the like necessitates large samples that are costly in time and money. The Consumer Purchases Study r is, perhaps, the only study in which an attempt was made to get a comprehensive cross section of the nutritional quality of diets in the United States as a whole and, separately, in cities, villages, and farm communities in the various regions of the country. Even in this study, certain population groups were omitted. Furthermore, the Consumer Purchases Study covered the period 1935–36 and more recent information on the quality of family diets is needed.

The survey of Family Spending and Saving in Wartime² for the spring of 1942 gave averages for urban, farm, and rural nonfarm groups, but no information at all for particular communities. Besides, it did not provide data for appraising the adequacy of the diet of each family separately. The general findings were that among farm families average diets were adequate at all income levels. It seems reasonable to suppose that analysis of family diets singly would reveal a relatively high proportion of poor diets among low-income farm families.

The study reported in this publication was undertaken in a county in southern Ohio and another county in central Georgia in which the economic levels of families were slightly below the averages for their regions at a time when national farm income was high. Its purpose was to find out the quality of diets of families living in farming communities in these counties in order to learn the kind and extent of dietary shortages that may occur among such families and the characteristics of those whose diets are poor.

Information will be found in this report on the kind, quantity, and money value of food consumed for 1 week in the early summer of 1945 by a random sample of the families in the open country of each county. The nutritive value of the food consumed is given also, both as averages for all the families and as distributions of the families by the quality of their individual diets.

The data are shown separately for each county. Within each county the data for farm and nonfarm families for the most part are kept distinct. Farm families have been classified by net cash income in two ways—as a total for the family and as a per capita average—

Misc. Pub. 452.

² Family food consumption in the United States. Misc. Pub. 550.

¹ Family food consumption and dietary levels. Five regions. Farm series. Misc. Pub. 405.
Family food consumption and dietary levels. Five regions. Urban and village series.
Misc. Pub. 452

and data for each class within them are then given separately. In addition, in the Georgia county, data are furnished separately for white and for Negro families, and for farm owners and renters apart from farm share croppers and laborers. Families are classified to some extent also by other factors that might affect the quality of their diets.

In each of 282 families in the Georgia county, a record was kept of the kinds and weight of food brought into the home during a 7-day period; this was immediately preceded and followed by an inventory of all the food on hand. The food on hand at the time of the beginning inventory and the food brought into the home during the 7 days, less any food on hand at the time the record was closed, gave the family's food consumption. Any food from family food supplies that was fed to farm animals, given away, or thrown out was also recorded and later deducted.

In the Ohio county, two methods were used to collect the information on food. About 56 families in the Ohio county gave the same type of food records as those in the Georgia county, and another 181 families gave food lists. Because so few families in the Ohio county were willing to participate, no comparison between consumption as reported on the record and the list could be made. To describe the consumption in the Ohio county, the records and lists were pooled; any possible differences due to schedule form were obscured by the smallness of the samples. For the food lists, each family was interviewed only once, at which time the homemaker reported on the food used during the 7 days preceding the interview.

In addition to giving the information on food consumption all families reported on their incomes for a 12-month period between January 1, 1944, and June 30, 1945, selecting the period on which they could report best; they also gave other information needed to analyze their food consumption.

FAMILY DIETS IN THE TWO COUNTIES

The Average Daily Diet

For ease in appraising the nutritional quality of the food consumed by families living in the open country in the two counties, quantities of the hundreds of foods used from family supplies were converted to quantities of nine dietary essentials.3 Nutritive values for the diets of the families in each county are given in table 3 (Appendix B), in terms of averages per day for calories, protein, calcium, iron, vitamin A value, ascorbic acid, and three of the B-vitamins.

To minimize family size and composition differences in respect to sex, age, and physical activity, the nutritive values for the diets have been expressed on a per-nutrition-unit basis using the National Research Council's 1945 recommended dietary allowances with the allowances for the moderately active man treated as a base. (See Methodology, p. 85, and Appendix tables 4, 36, and 37.)

The average nutritive values of the diets of families in the two counties met allowances for some of the dietary essentials by a greater margin than for others. In the Georgia county average values for thiamine, iron, and niacin met allowances by the widest margin, 50 percent or more, and calcium was at the other extreme with no leeway at all; vitamin A value was also met with a narrow margin, less than 10 percent over allowances. In the Ohio county, there was a margin of at least 20 percent over allowances for all essentials and for four of them-iron, thiamine, ascorbic acid, and vitamin A value—the margin was from about 50 to 60 percent over allowances.

Average values for iron in the diets of open-country families were found to be similar in the two counties. Diets in the Georgia county were higher in thiamine and niacin and lower in the six other dietary essentials than diets in the Ohio county.

Individual Family Diets

Averages by themselves tell an incomplete story. The content of the food consumed by each family, therefore, was compared individually with the recommended allowances of 1945 of the National Research Council and classified into one of four groups for calories and each of eight important nutrients. The four levels represent the following percentages of allowances: (1) 100 percent or more; (2) 67 to 99 percent; (3) 34 to 66 percent; (4) 33 percent or less. The classification 4 permits simple and uniform tabular presentation of the

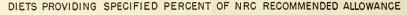
Represents nutritive value of food brought into family kitchens before preparation for table. See Appendix, page 89, for source of data on nutritive value and for cooking losses estimated for 4 vitamins (Appendix table 40).
 See Appendix table 39 for quantities of dietary essentials covered by class intervals.

data. It also provides a basis for grading the diets according to the dietary essential in the diet that meets the recommended allowances least (fig. 1 and Appendix table 5). These are broad levels for diet quality and a wide range of variation was found within each level. In addition, therefore, cumulative frequency curves are shown in figures 2 and 3 from which the percentage of families that had more than a given number of calories or units of any nutrient may be read.

The limiting dietary essentials

Diets of more than 10 percent of the families, when studied individually, were found to have failed to meet the recommended allowances in full for each essential (fig. 1 and Appendix tables 6-14). This was true in both counties, except for thiamine for which nearly all of the families in the Georgia county had diets that met recommendations.

The three nutrients found in shortest supply were calcium, ascorbic acid, and vitamin A value. Only about 40 to 70 percent of the family diets in the Georgia county and about 70 percent of those in the Ohio county met allowances fully for these nutrients. The vitamin A value



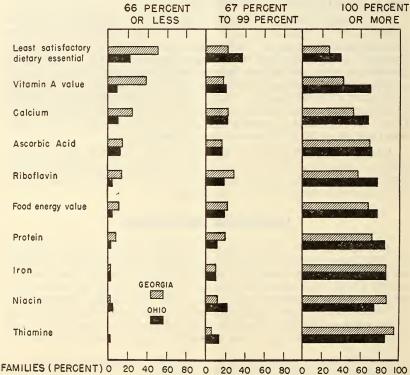
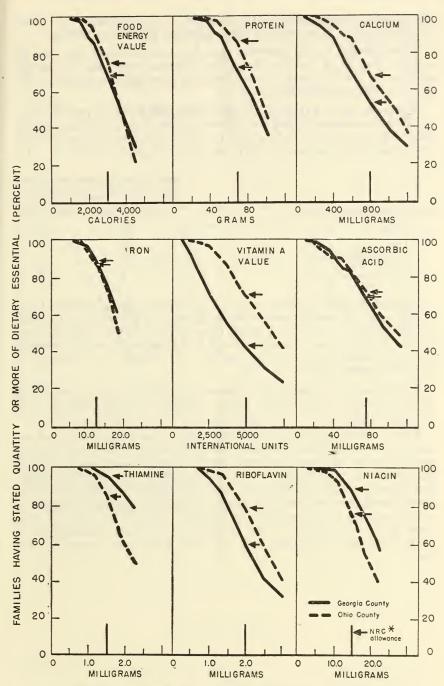


FIGURE 1.—Diets at three levels of nutritional quality, early summer 1945, open-country families in a Georgia and an Ohio county.



QUANTITIES CONSUMED PER NUTRITION UNIT PER DAY

FIGURE 2.—Distribution of diets by food energy value and nutrient content, early summer 1945, open-country families in a Georgia and an Ohio county.

*Indicates National Research Council's recommended dietary allowance for moderately active man which is equal to one nutrition unit.

for 13 percent of the diets in the Georgia county was below one-third of allowances. There was no other shortage as extreme as this.

When graded by the essential that was least satisfactory, diets of only 28 percent of the families in the Georgia county and 40 percent of those in the Ohio county were found to meet the allowances in full for all of the nine essentials.

About one-half of the families with diets that failed to provide twothirds of recommendations were short in more than one dietary essential. The figures below show that 1 in 7 of the Georgia diets and 1 in 20 of the Ohio diets were short in as many as three nutrients:

Percent of diets in which any essential is less than two-thirds of NRC recommended dietary allowances

Number of dietary essentials:	Georgia county	Ohio county	
None	50	76	
One	25	14	
Two	10	5	
Three or four		3	
Five or six		1	
Seven or more		1	
2010H 01 H010H12H1H1			

Diets that failed to meet at least two-thirds of the allowance for a single essential usually were short in vitamin A value in the Georgia county and in ascorbic acid in the Ohio county. Diets were likely to be low in calcium next, in either county; this was followed by ascorbic acid shortages in the Georgia county and vitamin A shortages in the Ohio county.

When diets were short in two essentials, the shortages were likely to be found in two of these three—vitamin A value, calcium, and ascorbic acid.

Three or more shortages in the Georgia diets usually occurred because of need for more calcium, vitamin A value, riboflavin, calories, protein, or ascorbic acid, in that order; few diets were low in iron or niacin and none in thiamine. All the essentials were involved in the few Ohio diets that had three or more shortages but usually the diets were found low in some combination including calcium, vitamin A value, ascorbic acid, riboflavin, or calories. Among the families with three or more shortages in their diets are those whose consumption of milk, meat, grain products, and succulent fruits and vegetables was low.

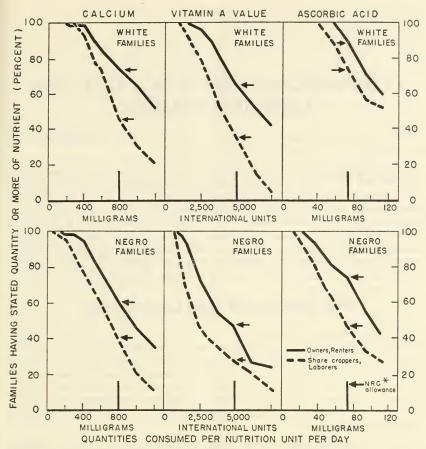


Figure 3.—Distribution of diets of white and Negro families by calcium, vitamin A, and ascorbic acid values of diets, early summer 1945, farm owners and renters, and share croppers and laborers in a Georgia county.

^{*}Indicates National Research Council's recommended dietary allowance for moderately active man which is equal to one nutrition unit.

COMPARISON OF DIETS OF FARM AND NONFARM FAMILIES

The sample of nonfarm families is small but provides enough data for some comparison with the farm groups.

Farm families ate more food and had diets that were higher in calories and all eight nutrients than the few nonfarm families living in the open country (Appendix tables 3 and 15). Diets for the two groups were most similar in calorie content and least similar in calcium content. Greater difference was found between diets of farm and nonfarm families in the Ohio county than in the Georgia county. Average values for farm diets in both counties were more than 10 percent greater than nonfarm in calcium, riboflavin, and ascorbic acid, and in the Ohio county also in protein, thiamine, and iron.

Diet Quality and Food Consumption

In both counties the average nonfarm diet had only about three-fourths as much milk and calcium as the average farm diet. In the Georgia county where milk and grain products were the chief sources of calcium, 41 percent of the nonfarm families and 55 percent of the farm families had diets that met calcium recommendations in full. In the Ohio county where milk was the primary contributor of calcium, 47 percent of the nonfarm diets and 72 percent of the farm diets met calcium allowances.

Lower average ascorbic acid, iron, and vitamin A values reflected lower average consumption of succulent vegetables and fruits by nonfarm than by farm families. The lower values of nonfarm diets for protein, thiamine, and niacin were associated with consumption of smaller quantities of meat, poultry, and fish, and grain products.

Nonfarm families in the open country in the Georgia county consumed somewhat more eggs, dry beans and peas and nuts, potatoes and sweetpotatoes, and fats and oils than farm families but not enough to raise the nutritional level of their diets in any respect to that of farm families. In the Ohio county dry beans and peas and nuts was the only group of food of which nonfarm families used more than farm families.

Sources of Food

Home-produced food, as is usual, made a smaller contribution to diets of nonfarm than of farm families living in the open country (Appendix table 3). It accounted for two to four times as much of each essential in the farm diets as in the nonfarm. Conversely nonfarm families purchased more of every dietary essential (except ascorbic acid in the Ohio county) than farm families.

Nonfarm families, on the average, had higher net cash family incomes, \$1,020 compared with \$750 in the Georgia county, and \$1,850 compared with \$1,780 in the Ohio county, and laid out more cash for food. Their diets, however, were worth less than those of farm families when home-produced foods were valued at purchase prices (table 16). Nonfarm families raised only about one-third of their food supply in terms of money value while farm families raised about two-thirds of theirs. The purchased food of nonfarm families represented two-thirds of the money value of their total food supply but their purchased food was worth less than the home-produced food of farm families.

The groups of food purchased most by nonfarm families were: Meat, poultry, and fish; dry beans and peas and nuts; grain products; fats and oils; and sugars and other sweets.

The groups of food that nonfarm families most often produced at home were milk, eggs, and succulent vegetables. Among these are the two foods that would do most to improve nonfarm diets—milk and the green and yellow vegetables. A few nonfarm families reported liberal consumption of these home-produced foods. More nonfarm families need to be encouraged to start or increase home production of milk and vegetables. There will always be some families in the open country, of course, for whom increased food production is not practicable. The investment needed for a dairy cow as well as the land and time needed for home food production are important considerations.

SOME FACTORS INFLUENCING QUALITY OF FARM DIETS

Only farm families are considered in this section of the report. Dietary patterns of nonfarm families, as shown before, are different from those of farmers who produce a large share of their food supply at home, and the sample of nonfarm families covered is too small to permit separate analysis for the factors that influence diets.

Kind and Quantity of Food

The kinds and quantities of foods adults choose to eat are in large part influenced by what they, as children, ate at home. Although in time the early home diet is, of course, modified by personal likes and dislikes, food customs of associates, changes in economic situation, education, and by market supply and innovations, a deeply ingrained food custom is likely to continue for generations, even when the situation that brought it about is gone and maybe forgotten. The diets of the farm families in the Georgia county and the Ohio county presented in this publication are examples of two of the many different dietary patterns that have developed in the United States.

Foods consumed by the families have been assembled into 11 groups on the basis of nutritive value and use in the diet. The quantities of food consumed are given as averages per person per week in table 15 for each food group and in table 18 for selected items of food.

On the average, farm families in the Ohio county ate much more than farm families in the Georgia county of foods in the following six groups: Milk and milk products; eggs; dry beans and peas and nuts; potatoes and sweetpotatoes; tomatoes and citrus fruits; and sugars and other sweets. Foods that were consumed in much larger quantity by the Georgia families were in these three groups: Green and yellow vegetables, other vegetables and fruits, and grain products. The diets of farm families in both counties contained similar average quantities of meat, poultry, and fish and of fats and oils.

The quantities of food reported by many families were extraordinarily high. Some homemakers had difficulty and perhaps did not succeed in reporting the food consumption of their families free from food given to pets, poultry, and other farm animals. Families that reported food fed to animals most frequently listed fluid skim milk, corn bread, peas, and other vegetables. Another source of error is unreported food waste, especially the fat meat that is left on plates, and the fat and cereal that sticks to pans. The foods that might be reported but not consumed by the families are important carriers of calories and all the nutrients.

Families with relatively high incomes and more home-produced food probably are more likely than others to have animals and to feed

them edible family supplies and to throw out food. Since these are the families that usually have the better diets, it is perhaps safe to assume that these families would not have been classified differently as to the nutritional quality of their diets if they had reported their food consumption more accurately.

Five illustrations of family food consumption that provided diets (uncooked food basis) meeting recommendations in full are given in table 1. The families comprised four to five members and had per capita incomes for the year varying from \$80 to \$700. The diets were valued at \$3.12 to \$4.55 per person per week, of which \$2.73 to \$4.18 worth was furnished by the farm. Each family followed a different dietary pattern. Other illustrations of diets that met allowances might have been presented. The diets given were selected because the families consuming them represented common family sizes and because the kinds and quantities of foods used showed good management in that the diets furnished no more than 3,500 calories per nutrition unit per day.

Table 1.—Quantities of food in 5 diets (uncooked food basis) meeting NRC recommended allowances in full for 9 dietary essentials, farm families in a Georgia county and an Ohio county, early summer 1945

Food group and selected facts about the family	Average quantity of food consumed by selected farm families, per person per week Georgia county Ohio county				
			Ohio county		
Milk equivalent 1 quarts Fats, oils pounds Eggs dozens Meats, poultry, fish pounds Dry beans and peas, nuts 2 do	1. 77 1. 04	3. 14 . 76 . 92 1. 05	6. 57 . 72 . 90 2. 48	3. 94 1. 02 . 34 2. 60 . 05	8. 77 . 55 . 68 . 95 . 67
Total vegetables and fruitsdo	14. 17	22. 06	28. 63	12. 29	6.06
Potatoes, sweetpotatoesdo Tomatoes, citrus fruitdo Green and yellow vegetablesdo Other vegetables and fruits 3do	2. 12 4. 35	1. 18			1. 52 1. 79 . 58 2. 17
Grain products ⁴ do Sugars, other sweets ⁵ do	7. 08 . 56	7. 72 . 74	4. 44 . 86		1. 97 3. 77
Household size in equivalent personsnumber_ Money value of food per person per week:			5. 00		
All fooddollars_ Home-produced fooddo Net cash income per person for year_do	. 97	3. 12 2. 73 120	4. 18	1. 52	3. 36 1. 84 540

¹ See table 15, footnote 3.

² See table 15, footnote 5.

³ See table 15, footnote 6.

⁴ See table 15, footnote 7.

⁵ See table 15, footnote 8.

Contributions of food groups to nutritive value of diets

The percentage contributions made to calories and the 8 nutrients in the diets of the farm families by the foods in each of the 11 groups, separately or in certain combinations, are given in table 19, and illustrated for selected nutrients in figures 4 and 5.

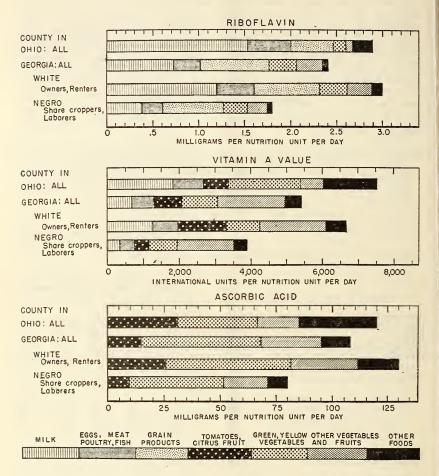
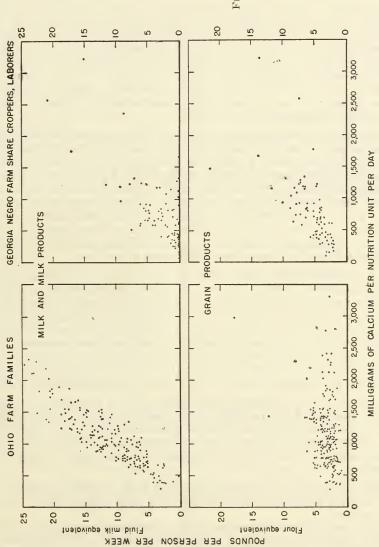


FIGURE 4.—Dietary sources of three nutrients, early summer 1945, farm families in a Georgia and an Ohio county.

The outstanding fact observed in these percentage contributions is that, for the Georgia farm families, foods of vegetable origin—grain products, vegetables, and fruits—were major contributors of several of the nutrients usually contributed by foods of animal origin. In the Ohio county, however, farm diets followed rather closely the usual pattern of farm diets in the United States.

FIGURE 5.—Calcium content of diets in relation to consumption of milk and grain products, early summer 1945, farm families in an Ohio county and Negro farm families of share croppers and laborers in a Georgia



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In the Georgia diets, grain products were the primary source of food energy value and of all nutrients except vitamin A value and ascorbic acid; they contributed as much calcium and riboflavin as milk products and as much protein as milk products and meat, poultry, and fish combined. Vegetables and fruit also accounted for more protein than either milk products or meat, poultry, and fish; in addition, they provided nearly as much riboflavin as milk products. This unusual situation in the Georgia county is attributable to extraordinarily low consumption of milk products and table fats, compensated for partly but not fully by extraordinarily high consumption of vegetables, fruits, and grain products in general and by lima beans, field peas, self-rising flour, and enriched grain products in particular.

Calcium.—The unusual relationship of grain products to calcium in the diets of Negro farm share croppers and laborers in the Georgia county and the more usual relationship of milk and milk products to calcium in farm diets in the Ohio county is shown in the scattergram in figure 5. Grain products contributed about one-third of a gram of calcium to daily diets in the Georgia county, and barely one-tenth of a gram of calcium to diets in the Ohio county. Self-rising flour (flour with added leavening), used widely in Georgia, was responsible for most of this difference.

The Georgia families used 20 times as much calcium-rich, self-rising flour as plain (non-self-rising) flour, consuming about 2.5 pounds of self-rising flour and 0.1 pound of plain flour per person per week. The Ohio families consumed about 1.0 pound of plain flour and only a negligible quantity of self-rising flour. Each pound of white self-rising flour contributes approximately 1 gram of calcium whereas each pound of plain flour provides only one-twelfth of a gram. It follows, therefore, that from white flour alone the Georgia families received an average of about 2.5 grams of calcium per person per week while the Ohio families got barely 0.1 gram of calcium.

In order to use the plain white flour for baking, the Ohio families had to add some leavening agent to it. Yeast was included in estimating the calcium value of the diets but baking powder was omitted. If calcium credit is given for the 0.02 pound of baking powder purchased per person per week, an average of 0.49 gram of calcium per week should be added to the Ohio diets; such addition, however, would not change the conclusion that the Ohio families had most of their calcium from milk or the fact that they had less calcium from grain products plus baking powder than families in the Georgia county.

Calcium recommendations were met in full by fewer than six-tenths of the diets of farm families in the Georgia county and by slightly more than seven-tenths of those in the Ohio county (Appendix table 8). Two-thirds of calcium allowances were met by the diets of nearly eight-tenths of the Georgia families and nine-tenths of the Ohio families.

The percentage of families that had diets meeting two-thirds of the calcium allowances at given levels of milk consumption is shown

⁵ Data were obtained on the purchase of baking powder rather than on its consumption, to simplify collection. Purchase data have been used in place of consumption data on the assumption that for a group of families the two averages for a staple item will be about the same.

in table 20 and at given levels of grain consumption in table 24. These tables indicate that nearly all the Georgia diets furnishing at least two-thirds of calcium allowances contained for each person 1 glass of milk or its equivalent in nonfat solids per day and 5 pounds of grain products per week. The Ohio diets at this calcium level were twice as high in milk (2 glasses per day) but much lower in grain products (3 pounds per week).

All farm families in the Ohio county had milk in some form but about 15 percent of those in the Georgia county had none during the week of the survey. Of the Georgia farm families that had no milk about two-fifths succeeded in getting at least two-thirds of calcium recommendations.

The food consumption of a Negro cash tenant family of four, including the parents, a 6-year-old girl, and a 3-year-old boy, has been selected for presentation because of wide interest in the nutrient content of diets that include little variety and none of such an important food as milk. The diet is limited in variety and would not lend itself to appetizing menus. But the type of menu it afforded was fairly frequent among families in the Georgia county.

The food (uncooked food basis) consumed by this family met recommended allowances as follows: 70 percent for calcium, 90 percent for food energy and vitamin A value, and 100 percent or more for protein, riboflavin, ascorbic acid, niacin, iron, and thiamine. There were other families with children that had milk-free diets of equal or better quality but their diet quality was achieved less efficiently by consuming an excess of calories. During the week of their food record this family consumed the following kinds and quantities of food:

I	Home-produced food:	
	Eggsnumber_	14
	Chickenpounds_	2.65
	Tomatoes, freshdo	9.00
	Collards, freshdo	2.00
	Field peas, fresh shelleddo	
	Onions, maturedo	1.00
	Watermelondo	
P	urchased foods:	
	Self-rising white flour, enricheddo	12.60
	White water-ground corn mealdo	10.80
	White gritsdo	
	Cane sirupdo	5.60
	Vegetable shorteningdo	
	Stewing beef, bone indo	

All the eggs, chicken, and vegetables were furnished by the farm. The family purchased only six foods for which they paid \$2.50.

Meals were simple. The morning meal was likely to be biscuits and sirup; sometimes it included fried eggs. The usual noon meal consisted of peas, collards or soup, biscuits or corn bread, sirup, and perhaps sliced tomatoes. The evening meal was the same as the noon meal. Beef stew and fried chicken were served on the same day, a Sunday, for all three meals of that day.

Riboflavin.—Food from animal sources made chief contributions of riboflavin to diets in the Ohio county and from vegetable, fruit, and grain sources in the Georgia county (fig. 4).

About six-tenths of the farm families in the Georgia county and eight-tenths of those in the Ohio county had diets that met the recommended allowances for riboflavin in full. Almost nine-tenths of the Georgia families and about all the Ohio families had diets that provided at least two-thirds of the riboflavin allowances (Appendix table 13).

Nearly all farm families in both counties with diets furnishing two-thirds of riboflavin allowances used an average of 1 glass of milk or its equivalent per person per day (Appendix table 20). In the Ohio county the milk group was the only food group in which consumption followed closely the riboflavin content of the diets. In the Georgia county, however, two out of three of the diets that contained no milk at all provided two-thirds of riboflavin allowances; but nearly all families with diets containing two-thirds of riboflavin allowances had at least 2 pounds of meat, poultry, and fish per person per week and 3 pounds of grain products, much of which was enriched or whole grain (Appendix tables 21 and 24).

Protein.—Somewhat more than seven-tenths of the farm families in the Georgia county and fewer than nine-tenths of those in the Ohio county had diets that met protein allowances in full (Appendix table 7). Most families, however, had diets that provided at least two-thirds of protein allowances. The few diets that failed to meet the latter level contained less than 2 pounds of meat, poultry, and fish, and 4 pounds of grain products per week, and 1 glass of milk or its equivalent per day for each person (Appendix tables 20, 21 and 24).

Iron.—The allowances for iron were met to about the same extent in the farm diets of both counties (Appendix table 9). The diets of 88 percent of the families furnished the iron allowances in full and nearly all diets furnished at least two-thirds of the allowances.

Food energy value—Nearly seven-tenths of the farm families in the Georgia county and eight-tenths of the farm families in the Ohio county had diets that provided calorie allowances in full (Appendix table 6). Few diets in the Ohio county but as many as 1 out of 10 diets in the Georgia county failed to provide at least two-thirds of the calorie allowances. The quantity of grain products used by nearly all farm families with diets as short as this in calories was below the median level of consumption for farm families in their county—less than 4 pounds per person per week in the Georgia county and 2 pounds in the Ohio county (Appendix table 24).

Vitamin A value.—Carotene was as usual the chief source of vitamin A value in the diets. Vegetables and fruits contributed more than one-half of the total value of vitamin A in diets of the Ohio farm families, and more than two-thirds of it in diets of the Georgia farm families (fig. 4).

Although the survey was conducted almost simultaneously in the two counties, seasons were not parallel. Seasonal differences were reflected in kinds of vegetables and fruits consumed. The families in the more northern county were enjoying such early garden vegetables as lettuce, cabbage, snap beans, garden peas, mustard greens, and green onions. The families in the more southern county, at the peak of their garden season, had generous quantities of fresh field peas, lima beans, tomatoes, melons, and corn in their diets as well as peaches from

their orchards. As a result green and yellow vegetables were the most important carotene source in the Ohio diets and the group of vegetables and fruits termed "other" were the main ones in the Georgia diets. In a season of more plentiful supply (late summer, fall, or winter) sweetpotatoes and green leafy vegetables undoubtedly would have accounted for a greater share of the vitamin A value in the diets of the Georgia families and total vitamin A values would have been greater.

Only about four-tenths of the farm families in the Georgia county and seven-tenths of those in the Ohio county met allowances for vitamin A value in full (Appendix table 11). This was by far the most limiting dietary essential in the Georgia diets, nearly 40 percent failing to furnish even two-thirds of the recommendations; nearly all

Ohio farm diets, however, furnished this much.

Distribution of families by the level of their consumption of specific food groups indicates that nearly all farm families in the Georgia county that consumed 6 pounds of green and yellow vegetables, 9 pounds of other vegetables and fruits, and 51/4 quarts of milk per person per week usually had diets providing at least two-thirds of allowances for vitamin A value (Appendix tables 20, 22, and 25). Ohio families, because they got appreciable quantities of vitamin A from butter and margarine, reached this level of diet quality with only 2 pounds of green and yellow vegetables, 3 pounds of other vegetables and fruits, and 31/2 quarts of milk per person per week.

Ascorbic acid.—More than nine-tenths of the ascorbic acid in the diet (uncooked food basis) of the farm families in both counties came from fruits and vegetables. Milk and milk products contributed most of the ascorbic acid from other sources (fig. 4).

Green and yellow vegetables contributed a higher proportion of the ascorbic acid in the farm diets than any other food group. Tomatoes and citrus fruit were almost as important as green and yellow vegetables in the diets of families in the Ohio county but other vegetables and fruits took second place in the diets of families in the Georgia county. Families in the two counties used about equal quantities of tomatoes and citrus fruit as a group. In Ohio this food group included twice as much citrus fruit as tomatoes while in Georgia it consisted chiefly of tomatoes, only half as rich in ascorbic acid as citrus fruit. As a result, farm families in the Georgia county got only about one-half as much ascorbic acid from this food group as those in the Ohio county.

The contribution of the group classified as other vegetables and fruits to the ascorbic acid value of the Georgia diets illustrates the importance of foods commonly considered only fair sources of a nutrient when eaten in large quantity. The Georgia farm families consumed about 9 pounds of foods in this group per person per week, or two and one-half times as much as the Ohio families. The Ohio pattern of consumption is more usual. Watermelon was in season in Georgia and accounted for about 40 percent of the other-vegetables-and-fruits group.

Season was also a factor in the small contribution made by potatoes and sweetpotatoes to ascorbic acid in the diets of the Georgia families: when the study was made sweetpotatoes were not ready for harvest.

Diets of farm families in both counties were about equal in ascorbic acid; approximately 7 out of 10 diets met allowances in full and 1 out of 10 diets failed to provide two-thirds of allowances (Appendix table 10). In the Georgia county, families with diets containing at least two-thirds of ascorbic acid allowances used at least 2 pounds of green and yellow vegetables, 1 pound of tomatoes and citrus fruit, and 3 pounds of other vegetables and fruits; in the Ohio county, diets reaching this level contained only 1 pound of green and yellow vegetables but similar quantities of the foods in the other groups.

Thiamine and niacin.—In order of the quantity they supplied, the three most important sources of thiamine and niacin were grain products, vegetables and fruits, and eggs, meat, poultry, and fish (Appendix table 19).

Enriched flour, corn meal (not degermed in Georgia), and bread in the diets of families in both counties were the chief grain sources of thiamine and niacin. Thiamine from vegetables came primarily from field peas, green lima beans, and okra in the Georgia diets and from dry beans and peas and potatoes in the Ohio diets.

Eggs, and meat, poultry, and fish supplied a greater share of niacin than of thiamine, primarily because beef, fish, and chicken are richer sources of niacin than of thiamine. Thiamine-rich pork on the other hand, amounting to about one-third of the meat, poultry, and fish group, provided more than one-third of the thiamine that came from the meat group.

Due to enrichment of flour and meal the diets of nearly all farm families in the Georgia county and nearly nine-tenths of the families in the Ohio county, met the thiamine allowances in full (Appendix table 12). Niacin was a more limiting essential; only about nine-tenths of the Georgia diets and eight-tenths of the Ohio diets met the niacin allowances in full, but only a few diets failed to meet two-thirds of allowances (Appendix table 14). For the most part, families with diets that were short in thiamine and niacin consumed less than 4 pounds of grain products and 2 pounds of meat, poultry, and fish per person per week (Appendix tables 21 and 24).

Contributions of home-produced food

Home-produced food was an important factor in the quality of diets. Three-fourths or more of the Georgia families that had diets providing at least 67 percent of allowances had gardens in 1944 and brood sows, milk cows, and poultry in the summer of 1945. Even in the lower per capita income groups the average value of home-produced food was higher for those that had better diets; a large share of the families had gardens, milk cows, and other sources of home-produced foods (Appendix table 26).

Home-produced foods made large contributions to the diets of farm families in both counties (Appendix table 3). They provided more ascorbic acid, thiamine, niacin, and iron to diets in the Georgia county than in the Ohio county, reflecting seasonal differences in the kinds and quantities of vegetables, fruits, and grains furnished by farms in the two counties (Appendix table 15). Specific home-produced foods that

figured more prominently in the Georgia than in the Ohio diets and made large nutritional contributions to Georgia diets because of concentration of nutritive value or quantity consumed, were the following: Fresh lima beans, field peas, cabbage, okra, tomatoes, corn, and watermelon; corn meal, and cane sirup (table 2).

On the other hand, home-produced foods contributed more calcium, riboflavin, and protein to farm diets in the Ohio county than to those in the Georgia county. In large part, this was the result of a greater abundance of milk and other livestock products in the Ohio county.

Table 2.—Important home-produced foods, averages for farm families in a Georgia county and an Ohio county, early summer 1945

Food group	Food	Average tity of produce consumperson	home- ed food	
		Georgia county	Ohio county	
Milk, cream, ice cream, cheese. Fats, oils	Fluid milk (whole milk, buttermilk, skim milk).	Pounds 4. 92	Pounds 9. 89,	
Eggs, meat, poultry, fish	Bacon	. 07 . 23 . 52 . 43 . 02	. 24 . 01 1. 06 . 67 . 29	
Green and yellow vegetables.	Chicken Lima beans, fresh and canned (unshelled weight). Cabbage, fresh and canned Okra, fresh and canned	. 47 1. 67 . 28 . 19	. 35	
	Garden peas, fresh and canned (unshelled weight). Field peas (unshelled weight) Mustard greens, fresh Green beans, fresh and canned Onions, green	3. 69 0 . 12 . 05	0 . 14 . 48 . 29	
Potatoes, sweetpotatoes Tomatoes, citrus fruit Other vegetables and fruits	Lettuce, leaf and head Potatoes, white Tomatoes, fresh Tomato juice, canned Corn, fresh and canned (in-husk	. 03 . 01 . 47 . 91 (¹) 2. 15	. 29 . 37 . 95 . 02 . 44 . 20	
	weight). Watermelon Cantaloup Apples, fresh and canned Peaches, fresh and canned Blackberries, raspberries, other	5. 82 . 12 . 01 . 19 . 01	0 0 . 44 . 25 . 31	
Grain products Sugars, other sweets	berries, fresh. Corn meal, white, not degermed. Corn meal, refined Cane sirup	. 44 . 32 . 33	(1) 0. 02	

^{1 0.005} pound or less.

Home-produced food in the Georgia county furnished diets with more vitamin A value, calcium, ascorbic acid, and riboflavin, on the average, than other essentials. But there were great differences among families. Some raised large quantities of foods that are important carriers of these nutrients and others raised little or none at all. About two-fifths of the families produced no milk or tomatoes at home and three-fifths no grain products (Appendix table 17). Farm families in the Ohio county were more homogeneous in respect to their home production. Milk, which can be a large contributor of calcium, riboflavin, and vitamin A, was furnished for family tables by about nine-tenths of the farms in the Ohio county.

Effect of 1944 gardens.—All but 5 percent of the farm families in the Ohio county and 10 percent of those in the Georgia county had planted gardens in 1944, the year before the survey. Georgia gardens were larger than Ohio gardens. In the Georgia county, 67 percent of all the gardens were one-half an acre or larger while in the Ohio county only 25 percent of the gardens were as large (Appendix table 27).

Families in the Georgia county that had gardens in 1944 had diets in the summer of 1945 that were somewhat better in vitamin A value and ascorbic acid than families that had no garden the previous year. Size of garden was important for diet quality. Families that had a potato and sweet-corn patch, plus a small garden (from ½ to ½ acre in size) in 1944 used an average of 61 cents worth of home-produced fruits and vegetables (fresh and processed) per person during the week of the study in 1945; families with a patch plus a large garden (¾ acre or more) in 1944 used garden produce worth nearly twice as much, \$1.13, during the week of the study. Differences between the diets of families with small and large gardens, therefore, are to be expected. Among families with the smaller gardens 42 percent had diets that failed to provide at least two-thirds of allowances for vitamin A value and 22 percent for ascorbic acid, while only about one-half as many with larger gardens had diets below the two-thirds line in either vitamin.

Since by the time of collection of data on their food consumption many of the families in the Georgia county were enjoying peak gardens, the kinds and quantities of home-produced food used were more related to their 1945 gardens than to their previous 1944 gardens. Some of the families having no gardens in the previous year must have had gardens in 1945 because they averaged 23 cents worth of home-produced vegetables and fruits per person per week during the week of the survey.

No clear effect either of having gardens or of size of garden on the quality of diets of farm families was indicated by the data from the Ohio county, probably because 1944 garden produce was about all consumed by the time of the survey and 1945 garden produce was not available in large quantity.

The kinds and quantities of vegetables and fruits furnished family tables by gardens during the season covered by the survey probably did not represent the supply raised the previous year. At the time of the survey, dry beans and peas and nuts produced in the previous year

by farm families in the Georgia county were all gone, comparatively few potatoes were on hand, and succulent vegetables and fruits were in relative abundance. The garden supply of all these vegetables and fruits was undoubtedly low for farm families in the Ohio county during the period surveyed, compared with other seasons.

Money Value of Food

All food

Farm family diets in the Georgia county that provided at least two-thirds of allowances or better in every dietary essential had an average retail value nearly twice that of less satisfactory diets, \$4.21 per person per week compared with \$2.22. Although the average money value of more satisfactory diets was higher than less satisfactory ones, there were some diets of very low money value that provided two-thirds of allowances (fig. 6 and table 28). Conversely, a few diets valued within the high range of \$5.00-\$5.99 per person per week failed to provide at least two-thirds of allowances.

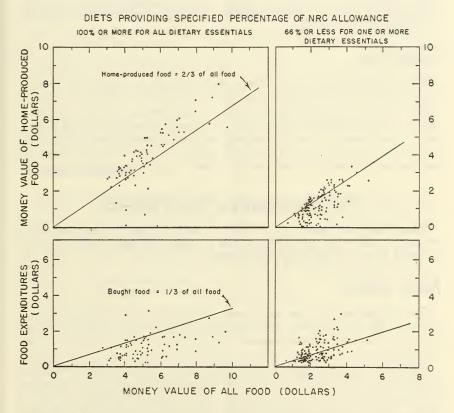


FIGURE 6.—Money value of all food in relation to money value of home-produced food and food expenditures, per person per week, two levels of diet quality, early summer 1945, farm families in a Georgia county.

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Home-produced food

The large difference in retail value between diets that met at least two-thirds of the allowances for each essential and those that did not was primarily due in the Georgia county to more liberal use of home-produced food by the families with more satisfactory diets. This is shown by the figures below:

	Average retail money value of food con- sumed per person per week by farm families in Georgia county, with the least satisfactory essential in diet meeting NRC allowances—	
Source of food: All food	67 percent or more \$4, 21	66 percent or less \$2, 22
Home-produced foodBought food		1. 24 . 82
Other food		. 16

The retail value of home-produced food usually represented twothirds or more of the retail value of all food in the more satisfactory diets. Diet quality, however, varied more among families according to the retail value of home-produced food, than according to expense for bought food (fig. 6).

Bought food

Food expenditures were more closely related to diet quality in the Ohio county than in the Georgia county (table 28).

More than one-half of the families in the Georgia county but only about one-seventh of those in the Ohio county spent less than \$1 per person per week for food. The median food expenditure for families with diets that met recommended allowances in full was about \$1 per person per week in the Georgia county and \$2 in the Ohio county.

Net Cash Income in Year 1944-45

Families were classified by their net cash income for the year, both "family" and "per capita," for ease in studying the relationship of net cash income and quality of diets.

Family income

Farm families with net cash incomes of \$995 or more had diets that were nutritionally better than those of families with lower incomes. But high incomes did not assure liberal diets. Some families in the

⁶ Families were asked to report on their income for the continuous 12-month period between January 1, 1944 and June 30, 1945, that was most convenient for them. From information on their cash income from the farm business and other sources and on expenses incurred in their pursuit, the net cash income of each family was derived both as a total or "family" income and as a hypothetically apportioned or "per capita" income. Net cash income includes no adjustment for value of inventory change in livestock or other farm products, value of farm-furnished food and housing, and cost of electricity or automobile for family use. If farm-operator families in the Georgia county had been classified by net cash family income adjusted for value of changes in inventory of livestock, hay, and grain, about 5 percent would have been placed in a lower income group and about 10 percent in a higher one. See Methodology, page 83, for a fuller explanation.

highest income group in each county had diets that failed to meet allowances in full for all essentials (Appendix table 5). Even in the group with cash incomes of \$2,995 or more nearly 40 percent of the families in the Ohio county were found to have diets that failed to provide the full allowances for one or more essentials.

Vitamin A value, calcium, and ascorbic acid were the essentials in shortest supply in diets of families at both the highest and lowest income levels in both counties (Appendix tables 8, 10, 11). Such shortages are associated in this survey with diets that contained less than 3½ quarts of milk, 1 pound of tomatoes and citrus fruit, and 2 pounds of green and yellow vegetables per person per week (Appendix tables 20, 22, 23).

Although families in the Georgia county spent about 40 percent of their cash incomes for food not furnished by the farm, the actual amount of their outlay was only slightly higher than that of the Ohio families who spent only 15 percent. On the average in the year 1944–45 the Georgia families spent \$280 for home food for the family out of an average cash income of \$750, and the Ohio families spent \$270 out of \$1,780 income.

Food expenditures in summer 1945 (the survey period) compared with the year 1944-45 reflected the garden season in each county. Farm families in the Georgia county spent about 80 cents less for purchased food per family per week in the summer when gardens were at peak production than their average over the previous year. Farm families in the Ohio county made up for insufficient garden stuff by spending about 60 cents more for purchased food in the summer as compared with the preceding year as a whole. During the summer, therefore, Georgia families were spending a smaller share of income for food, only 32 percent, and Ohio families were spending 17 percent, about their average for the year.

Per capita income

Families were also classified by their per capita incomes, the result obtained when net cash income is divided by the number of persons dependent on family income. Classification of families by per capita income ignores the economy of group living and the differences in needs due to age, sex, occupation, or the like of persons in the family. Hence the same per capita income is likely to yield a higher level of living for a large family than for a small one and also for a family including young children than for one of adults.

Some families at a low family income level were found at a relatively high per capita income level because of small size of family; the reverse was also found (Appendix tables 29 and 30).

The per capita income classification sharpened the relationship of income and diet quality (Appendix table 5). Diets were more satisfactory at almost every successively higher per capita income level. In both counties, however, some of the higher-income families had diets that failed to meet allowances fully.

In the Georgia county fewer than half of the families at the highest per capita income level, \$295 or more, had diets that met allowances in full. Thiamine was the only nutrient in which all diets at the highest level satisfied allowances (Appendix tables 6-14). Diets of nine-tenths of the families met allowances in full for calories, protein, iron, and niacin. The situation in respect to the other nutrients was less good. Only about eight-tenths of the families had diets that met allowances for calcium, ascorbic acid, and riboflavin and even fewer, six-tenths, reached vitamin A allowances. As already stated, the shortage in vitamin A value may be attributed in part to season.

The diets of only six-tenths of the families in the Ohio county with incomes of \$745 or more met allowances for all essentials. At these relatively high incomes, the Ohio diets were lowest in thiamine, vitamin A value, niacin, and ascorbic acid; at least one-tenth of the diets failed to meet allowances for these nutrients.

Race

Twice as many white families (40 percent) as Negro families (20 percent) had diets that met allowances fully (Appendix table 5). The better diets of the white families reflect their better economic position in relation to their farm tenure and cash income, and their opportunity for greater production of food for family use. More than 60 percent of the white families and only about 40 percent of the Negro families were farm owners and renters. The white families consumed an average of \$92 worth of home-produced food per person per year in 1944–45, compared with \$65 worth consumed by the Negro families. Net cash incomes for the year averaged \$940 for white families and \$580 for Negro families; on a per capita basis incomes were \$210 and \$120, respectively.

The four most limiting nutrients in the diets of both white and Negro farm families were vitamin A value, calcium, ascorbic acid, and riboflavin (Appendix tables 6-14). Diets of 5 out of 10 white families met allowances in full for vitamin A value, more than 6 for calcium, more than 7 for riboflavin, and more than 8 for ascorbic acid. But diets of fewer than 4 out of 10 Negro families met allowances in full for vitamin A value, fewer than 5 for calcium or riboflavin, and fewer than 6 for ascorbic acid.

Among the 30 percent of white farm families that had diets failing to meet allowances at least two-thirds for all essentials, more than one-half had diets short in only one essential; the rest had diets short in two to four essentials. Multiple shortages were more complex and occurred more frequently in Negro diets. Among Negro families 27 percent had diets that were below two-thirds of allowances in one essential, 18 percent in two or three essentials, and 12 percent in four to seven essentials.

When diets of white families failed to meet two-thirds of the allowances for any essential, the diet was likely to be low in vitamin A value or perhaps calcium. When two essentials were low, both vitamin A value and calcium were involved. Vitamin A value, calcium, and riboflavin were equally limiting in diets with three or four short essentials.

Among Negro families with diets low in one essential, it was usually vitamin A value and occasionally calcium or ascorbic acid that was short. Diets low in two essentials were likely to be short in vitamin A value in combination with ascorbic acid or less frequently with calcium. Essentials that were usually limiting in diets with three or more shortages, were limiting in this order: Calcium, vitamin A value, riboflavin, protein, food energy value, and ascorbic acid.

The superior nutritive quality of the diets of white over Negro families was associated with a greater abundance and better selection of food (Appendix table 15). Compared with white families, Negro families used only about half as much milk and milk products, eggs, and dry beans and peas and nuts, two-thirds as much meat, poultry, and fish, and four-fifths as much fats and oils and sugars and other sweets. Quantities of grain products and of succulent vegetables and fruits were about equal, on the average. Negro families had only about 40 percent as much tomatoes and citrus fruit, 60 percent as much potatoes and sweetpotatoes, and 85 percent as much green and yellow vegetables as white families; consumption of more than 130 percent as much other vegetables and fruits tended to equalize their consumption of vegetables and fruits by weight, but did not raise the ascorbic acid and vitamin A value of their diets to a comparable level.

The retail value of food consumed by Negro families was only about 70 percent of that consumed by white families, reflecting differences primarily in consumption of home-produced food (table 16). Negro families had home-produced food worth 60 percent and purchased food costing 90 percent of that of white families.

To measure up to the diets of white farm families, Negro farm families would have needed to increase farm production for family use primarily of milk, meat, fish, fats, potatoes, tomatoes, and green and yellow vegetables.

Farm Tenure

Diets of families of farm owners and renters were found to meet allowances in full more than twice as frequently as diets of families of farm share croppers and laborers, in the Georgia county (Appendix table 5).

Among owners and renters, 21 percent had family diets that failed to provide at least two-thirds of allowances in one or more essentials, 7 percent in two essentials, and 6 percent in three to seven essentials. Both single and multiple shortages were more frequent in family diets of share croppers and laborers; 28 percent were found low in one essential, 10 percent in two essentials and 23 percent in three to seven essentials.

Only owners and tenants were found among the farm families in the Ohio county and therefore no study was made of their dietary patterns by tenure. The dietary patterns of farm owners and tenants in the Georgia county were found to be fairly similar and, therefore, the food records they supplied were combined in order to provide a larger number for each analysis unit. For the same reasons records from farm share croppers and laborers were combined but held separate from the owner-tenant group from whose diet patterns they differed sharply.

The most frequently occurring shortages were in the vitamin A value and calcium content of the diets of both groups of families. In addition, ascorbic acid, riboflavin, food energy value, and protein were found to be relatively low in the diets of more than 10 percent of the families of farm share croppers and laborers.

Farm tenure made more difference in diet quality of white families than of Negro families. Three times as many share croppers and laborers as owners and renters in the white group had family diets that failed to provide at least two-thirds of allowances for one or more essentials. In the Negro group, one and one-half times as many share croppers and laborers as owners and renters had such unsatisfactory family diets.

Even with the same cash income, family diets of farm share croppers and laborers were poorer than those of farm owners and renters. Among white families with annual net cash incomes between \$495 and \$994, the diets of 23 percent of owners and renters failed to provide at least two-thirds of allowances in one or more essentials, whereas 50 percent of the families of share croppers and laborers had diets equally unsatisfactory. Their average family incomes (\$690) and average per capita incomes (\$140) were similar.

Negro families of share croppers and laborers fared considerably worse than any other farm group in the Georgia county. Not only did more of them have unsatisfactory diets but their diets were unsatisfactory to a greater degree; 38 percent had diets that failed to provide more than one-third of allowances for one or more essentials. Moreover, 30 percent had diets falling short of two-thirds of allowances in three or more essentials; one-half of these were short in three or four essentials and the other one-half were short in five to seven of the nine essentials studied.

Family diets of Negro share croppers and laborers that failed to meet two-thirds of the allowances in only one essential usually were short in vitamin A value. Although the families' consumption of green and vellow vegetables and other vegetables and fruits would usually be considered good, quantities were not great enough to make up for low consumption of other foods that are important sources of vitamin A. During the period of the study, milk and tomatoes were the chief contributors of vitamin A value to the family diets of white farm owners and renters, and these families consumed three times as much of these two foods as did families of Negro share croppers and laborers. White families of owners and renters got an average per nutrition unit per day of 2.970 International Units of vitamin A value from animal sources and 3,630 International Units from vegetable sources. Negro families of share croppers and laborers got only about one-half as much vitamin A value from animal sources, 1,560 International Units, and two-thirds as much from vegetable sources, 2,340 International Units (fig. 4).

When diets of Negro families of share croppers and laborers failed to provide at least two-thirds of allowances for two nutrients, they were usually low in vitamin A value and ascorbic acid. Diets unsatisfactory to this degree in three or more essentials usually needed more vitamin A value and calcium and more ascorbic acid, riboflavin,

protein, or calories. Among the families with diets low in three or more essentials are those with low consumption of milk and meat, and succulent fruits and vegetables.

The better nutritional quality of family diets of owners and renters as compared with share croppers and laborers is due to a larger and better selected food supply, and especially to more home-produced food (Appendix tables 15 and 16). Families of share croppers and laborers purchased relatively more food but not enough more to make up for the food that families of owners and renters got from the farm. As a result the food that families of share croppers and laborers used had a retail value of only about three-fourths that of families of owners and renters. For diets equal to those of families of owners and renters, families of share croppers and laborers would need to step up their production for family use of milk, meat, and all kinds of vegetables, especially tomatoes, potatoes, and green and yellow vegetables.

The greater home-production of the family's food by owners and renters than by share croppers and laborers is associated to some extent with their longer residence on the same place (Appendix table 26). Two out of three owners and renters but only two out of five share croppers and laborers had lived on their places 3 years or longer at the time of the survey. Share croppers and laborers that had lived on the same place for 3 years or longer were better off than those with shorter continuity. Money value of their food from the farm during the 1944–45 schedule year averaged \$263 as compared with \$207. More had brood sows (55 percent compared with 41 percent), milk cows (51 percent compared with 32 percent) and gardens (87 percent compared with 76 percent). Keeping laying hens was not affected by length of time on the same place; about 95 percent of all families had laying hens.

The greater abundance of home-produced food that families of farm share croppers and laborers with longer residence on the farm place had, gave them better diets; about 60 percent of the diets of those in their dwellings 3 years or longer provided at least two-thirds of allowances for all essentials, compared with only about 40 percent of the diets of those with shorter residence.

Family Size and Composition

Family size

Smaller families were found to have better diets than larger families (Appendix table 5). Almost one-half of the two-member farm families in the Georgia county but only one-fourth of the four-member families and one-fifth of the six-member families had diets that met allowances fully. Differences by family size were somewhat sharper in the Ohio county where three-fifths of the two-member families compared with one-fourth of the four-member families had diets meeting allowances in full.

The fewer persons a given family income must support, the more satisfactory family diets tend to be. In the \$495-\$994 family income

group of the Georgia county, seven-tenths of the farm families with two or three members had diets providing at least two-thirds of allowances for all essentials, compared with only four-tenths of the families with six or seven members. Differences in respect to the calcium contents of the diets were especially striking: 96 percent of two- or three-member households but only 70 percent of six- or seven-member households had diets providing at least two-thirds of calcium allowances.

Families of similar household size had better diets at successively higher income levels. In the Georgia county only 42 percent of farm families of three to five persons with family incomes of \$0-\$494 had diets that provided at least two-thirds of allowances for all essentials, whereas 85 percent of those with incomes of \$995-\$1,494 had diets of comparable quality. At least two-thirds of the calcium allowance was provided by the diets of only three out of four families of this size in the \$0-\$494 income group but by the diets of all families in the \$995-\$1,494 income group. Similarly vitamin A values measured up to at least two-thirds of allowances for only 47 percent of the three- to five-member households with incomes of \$0-\$494, compared with 85 percent of those with incomes of \$995-\$1,494.

Family composition

Diets were better for families composed of adults only than for those including children (Appendix table 5). In the Georgia county, the diets of about one out of two families without children but only about one out of four families with children 7 to 20 years old and one out of five families with children 6 years or younger met allowances in full. In the Ohio county the diets of about one out of two families composed of adults only and one out of three households with children of any age met allowances in full.

In each county there were more families with children than families without children; consequently, the comparatively poor nutritional situation in families with children particularly needs attention. Families with children were four times as numerous as families without children in the Georgia county and one and one-half times as numerous in the Ohio county. Children 6 years or younger were found in one-half of all families in the Georgia county and in one-third of those in the Ohio county.

The relative nutritional quality of diets among families differing in composition is largely a result of differences in family income and household size. The families of adults only were smallest in size and had the highest per capita income, while the families with children 6 years of age and younger tended to be largest and had the lowest per capita income. Average per capita incomes in the Georgia county varied from \$140 for families with children 6 years or younger to \$290 for families of adults only; in the Ohio county similar averages were \$280 and \$810, respectively.

The greatest dietary difference between families with and without children was in calcium, in which children's needs are high in relation to adult's needs (Appendix table 8). The high correlation of calcium

and milk content of diets indicates that families with children were consuming too small a quantity of milk. In the Georgia county, diets of 94 percent of families of adults only, but diets of only 45 percent of families including children, met calcium allowances. Similar percentages in the Ohio county were 86 percent and 63 percent, respectively. Even fewer families including children 6 years or younger had diets that met calcium allowances, 37 percent in the Georgia county and 56 percent in the Ohio county. There were also large differences between families with and without children for five other essentials in the Georgia county; in descending order of magnitude, they were—riboflavin, calories, protein, ascorbic acid, and vitamin A value (Appendix tables 6, 7, 10, 11, 13).

Participation in Program of Farmers Home Administration

About one-fifth of the families in the Georgia county had at one time borrowed from the Farmers Home Administration (formerly the Farm Security Administration). FHA-borrower families were found to have diets that provided at least two-thirds of allowances for all essentials roughly one and one-half times as frequently as families that had not had the advantage of FHA financial and educational programs (Appendix table 31). The average family income and size of household were larger for borrower families than for other families. Their average per capita income was only \$130, however, compared with \$160 for other families.

The variation in diet quality between FHA borrower families and other families was somewhat more marked among the families at lower than higher income levels. Diets providing at least two-thirds of allowances were found one and three-fourths times as frequently among FHA borrower families as others in the \$0-\$494 income group, and one and one-third times as frequently at the \$995-\$1,994 income level.

The effect of the program on diet quality was particularly great among Negro owners and tenants. Nearly two and one-half times as large a proportion of FHA borrower families (73 percent) as others (31 percent) had diets providing at least two-thirds of allowances for all essentials. The somewhat higher per capita income of FHA borrowers, \$140 compared with \$130, and their greater family size, 6.39 compared with 4.32 persons, made their economic situation better than that of other Negro families of owners and renters.

SUMMARY

Many farm and nonfarm families living in the open country in one county in Georgia and in another in Ohio were found to have poor diets in the early summer of 1945. Low incomes in relation to the number of persons the income supported and small quantities of farmfurnished foods contributed to this situation. The two counties were selected in order to provide data on food consumption in a farming community in the North and another in the South where the economic level was somewhat below the average for the region. The nutritive value of the diets, therefore, does not tell the quality of diets of open country families in general. However, it does show that even in a year when national income is fairly high, as it was in 1945, all families are not well fed.

Families that participated in the dietary survey, 282 families in a Georgia county and 237 families in an Ohio county, kept records or made reports on their food consumption for a continuous 7-day period. Nutritive values for the unprepared foods that went into the family diets are compared with the National Research Council's recommended allowances for nine dietary essentials. Estimates on the percent of diets not meeting allowances tend to be understatements especially in respect to such vulnerable nutrients as ascorbic acid and the B-vitamins since the nutritive values of the food were computed from tables providing data on the composition of food as it enters the family kitchen before preparation for eating.

In the Georgia county the diets of only about three-tenths of the families provided in full the allowances for all essentials considered. About another two-tenths provided at least two-thirds of these allowances. Nearly two-tenths of the diets were so poor that, for at least one essential, they provided only one-third or less of allowances.

In the Ohio county families had much better diets. Four-tenths met allowances in full and another four-tenths met at least two-thirds of the allowances; all but a few diets met more than one-third of allowances.

The most limiting nutrients in food supplies of families in both counties were calcium, vitamin A value, and ascorbic acid.

Dietary shortages were more frequent among families in the Georgia county than among those in the Ohio county. In the Georgia county, 25 percent of the diets of open-country families failed to supply at least two-thirds of allowances for one essential, 10 percent for two essentials, and 15 percent for three to seven essentials. In the Ohio county, 14 percent of family diets failed to supply at least two-thirds of allowances for one essential, 5 percent for two essentials, and another 5 percent for three to eight essentials.

The key to the better diets characterizing the Ohio families as compared with Georgia was more milk cows for family use and more purchased food to supplement their home-produced food; both doubtless are related to higher incomes. Families in the Georgia county would have benefited from more milk and oranges. Families in the

Ohio county, on the other hand, would have improved their diets by using self-rising flour and home-produced vegetables and fruits to the extent that families in the Georgia county did. In late summer and fall, vegetables and fruits from the garden probably would have been more abundant on tables in the Ohio county. Although the times of collection of the information on food were fairly parallel for the two counties, there were seasonal differences because summer gardens mature later in the year in Ohio than in Georgia. The families in the Georgia county had from three to four times as much garden produce in their diets as did those in the Ohio county during the survey.

Grain products, milk and milk products, and vegetables and fruits were large contributors to the farm diets in both counties. Nevertheless the dietary patterns of the families in the two places were dissimilar. The kinds and quantities of food used by the farm families in the Ohio county was a fairly usual pattern, with milk contributing most of the calcium to the diet and much of the riboflavin, protein, vitamin A. and calories. The diets of the farm families in the Georgia county demonstrate, however, that large quantities of self-rising flour and whole and enriched grain products, and fresh tomatoes, green beans, peas, and other vegetables and fruits can provide much of the calcium and some of the other essentials ordinarily supplied by milk. Even though consumption of these foods compensated in part for shortage of milk, the quantities consumed failed to bring diets to levels of nutritional quality comparable in these respects with the diets of the Ohio families.

Farm families in the Georgia county that achieved diets providing at least two-thirds of allowances for all essentials, consumed per person per week an average of about 1¾ quarts of milk (1 glass a day), 2 pounds of meat, poultry, and fish, 3 pounds of green and yellow vegetables, 1 pound of tomatoes and citrus fruit, 5 pounds of grain products, and 9 pounds of other vegetables and fruits, besides quantities of foods in the other five groups. In the Ohio county families with diets of similar quality consumed an average of 3½ quarts of milk (2 glasses a day), 1 pound of meat, poultry, and fish, 1 pound of green and yellow vegetables, 1 pound of tomatoes and citrus fruit, 2 pounds of grain products, and 3 pounds of other vegetables and fruits in addition to other foods.

The home-produced food in the diets of farm families in both counties contributed nutrients in quantities ranging from 50 to 100 percent or more of recommended allowances for each dietary essential. Home-produced food accounted for 90 percent or more of allowances for vitamin A value, ascorbic acid, and thiamine in diets in the Georgia county and for 90 percent or more of allowances for vitamin A value. riboflavin, and calcium in diets in the Ohio county. Important contributors were milk and meat in the Ohio diets and vegetables and fruits in the Georgia diets. The average contributions, however, obscure the uneven production of food for home use by farm families in the Georgia county; only 60 percent produced milk or tomatoes at home and even fewer, 40 percent, raised their own grain. On the other hand, 88 percent of the Ohio families produced milk.

The contribution of home-produced food to the nutritive value of the diets during the survey period in the summer of 1945 probably was somewhat below its annual contribution. The summer consumption of home-produced dry beans and peas and nuts, potatoes and sweet-potatoes, milk, meats, and fats seemed low in the Georgia county; on the other hand there was a relatively high consumption of succulent vegetables and fruits and eggs. Vegetables and fruits and meats from home production seemed low in the diets of families in the Ohio county.

In both counties the retail value of farm family diets that met allowances in full for all dietary essentials was higher than the value of those that were less satisfactory. This was true especially in respect to home-produced food. Food expenditures showed little relationship to the quality of diets in the Georgia county, but in the Ohio county

food expenditures and diet quality were related.

Average family size was larger in successively higher income brackets and, therefore, somewhat obscured differences in diet adequacy from one family income level to the next. Smaller households were found to have better diets than larger households at the same income level. Families of similar size had better diets at successively higher income levels.

Diets of families including adults only were better than those including children and adults. The families composed of adults only had diets that were better in calcium, a nutrient needed in generous amounts by children. The poorest diets were found among families in which there were children of 6 years or less. Incomes of these families were low particularly in relation to number of persons supported.

Classified by per capita income rather than total income, families achieved improved diets at almost every successively higher income level, but at no income level did the diets of all families meet allowances in full. In the highest per capita income groups, shortages were in vitamin A value, calcium, and ascorbic acid, the same nutrients that

were shortest in family diets of the lowest income groups.

Farm families were found to fare better than nonfarm families in both counties. On farms in the Georgia county, farm tenure and food furnished by the farm diets were better among white families than Negro families, reflecting differences in cash income. Also, farm owners and renters had more satisfactory diets than farm share croppers and laborers. The diets of Negro families of share croppers and farm laborers were less adequate than those of any other farm group in the Georgia county; more of the Negro families had diets that failed to meet even two-thirds of allowances, in at least one nutrient, and shortages of several nutrients were also more frequent.

Families of farm owners and renters had better diets than share croppers and laborers, reflecting greater home production of food which, in turn, was to some extent associated with longer residence on their farms. The families of two out of three farm owners and renters but only two out of five farm share croppers and laborers had lived on their place 3 years or longer. Longer residence meant more milk cows and larger gardens for family use and therefore more farmfurnished food. These factors made a difference in the quality of diets

in the Georgia county.

In the Georgia county, families that had at one time borrowed from Farmers Home Administration were found to have better diets than others in the same income class that had not had the advantage of FHA's educational program. This was particularly true of families with low incomes and of families of Negro owners and tenants.

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APPENDIX B. TABLES

Table 3.—Nutritive value of diets, averages for open-country families in a Georgia county and an Ohio county, early summer, 1945

Location, occupation, net		House-			Averag	e nutri	tive val	ue of d	iets 1		
cash family income for year, race, and farm tenure	Fam- ilies	size in equiv- alent per- sons ²	Food energy	Pro- tein	Cal- cium	Iron	Vita- min A value	Ascorbic acid		Ribo- flavin	Nia- cin
	Num- ber	Num- ber	Calo- ries	Grams	Grams	Milli- grams	Inter- na- tional Units			Milli- grams	
COUNTY IN GEORGIA					All foo	d, per	nutritio	n unit	per da	y 3	
All families	4 282	4. 67	3, 500	87	0.8	19	5, 400	106	3.0	2.3	23
Farm families	4 249	4. 79	3, 500	88	.8	19	5, 400	107	3.0	2. 4	23
\$0-\$494 \$495-\$994 \$995 or more	94 97 48	4. 24 5. 17 5. 13	3, 400 3, 400 3, 700	84 85 95	.8 .8 1.0	19 19 18	5, 000 5, 300 6, 500	103 107 109	3.0 2.9 3.0	2. 2 2. 3 2. 7	22 22 24
White families	119	4. 65	3, 900	100	1.0	20	5, 800	120	3. 2	2. 7	25
Owners, renters Share croppers, la-	75	4. 68	4, 100	110	1.1	21	6,600	130	3.4	3.0	26
borers	44	4. 62	3, 500	90	.8	19	4, 500	105	2.9	2.3	23
Negro families	130	4. 91	3, 100	75	.7	18	5, 100	95	2.8	2.1	21
Owners, renters Share croppers, la-	51	5, 22	3, 400	85	.9	19	6, 700	115	3, 1	2. 4	22
borers	79	4.71	2,900	70	.6	17	3, 900	80	2.6	1.8	20
Nonfarm families	32	3.83	3, 400	80		18	4,900	94	2.7	2.0	22
White Negro	16 16	3. 85 3. 82	3,600 3,200	90 70	.6	18 17	7, 200 2, 600	110 80	2.8 2.6	2. 4 1. 6	24 19
COUNTY IN OHIO											
All families	4 237	3. 53	3,700	100	1.1	19	7, 400	115	2.3	2.8	20
Farm families	4 201	3.54	3,800	105	1.1	19	7, 500	120	2.3	2. 9	20
\$0-\$494_ \$495-\$994_ \$995 or more	22 43 114	3, 19 3, 84 3, 48	3, 500 3, 600 3, 700	90 100 103	1. 0 1. 0 1. 1	18 18 18	6, 500 5, 800 7, 900	$115 \\ 100 \\ 120$	2. 2 2. 3 2. 3	2. 6 2. 6 2. 9	20 18 20
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	65 25 24	3. 46 3. 48 3. 54	3, 700 3, 800 3, 900	100 105 110	1. 1 1. 1 1. 2	18 18 20	7,000 8,600 9,400	106 130 140	2. 2 2. 2 2. 4	2. 8 2. 8 3. 1	19 19 23
Nonfarm families	32	3.55	3,500	85	.8	16	6,800	90	1.9	2. 4	18
			All food, per person per day								
County in GeorgiaCounty in Ohio	4 282 4 237	4. 67 3. 53	2,900 3,100	80 93	1.0 1.2	18 18	4, 700 6, 600	98 105	2. 4 1. 9	2. 0 2. 4	18 16

Table 3.—Nutritive value of diets, averages for open-country families in a Georgia county and an Ohio county, early summer, 1945—Continued

		House-			Average	e nutrī	tive val	ue of d	iets 1		
Location, occupation, net cash family income for year, race, and farm tenure	Fam- ilies	size in equiv- alent per- sons 2	Food energy	Pro- tein	Cal- cium	Iron	Vita- min A value	Ascor- bic acid	Thia- mine	Ribo- flavin	Nia- cin
	Num- ber	Num- ber	Calo- ries	Grams	Grams	Milli- grams			Milli- grams		
				Home-p	produce	d food,	per nut	rition	unit pe	er day	3
COUNTY IN GEORGIA											
All families	4 282	4. 67	1,500	45	0.4	9	4,500	92	1.4	1.4	10
Farm families	4 249	4.79	1,600	48	. 5	9	4,700	95	1.5	1. 5	10
\$0-\$494 \$495-\$994 \$995 or more	94 97 48	4. 24 5. 17 5. 13	1, 400 1, 600 1, 900	44 46 57	.4	8 9 10	4, 300 4, 500 5, 800	90 95 100	1.4 1.5 1.7	1.3 1.4 1.8	9 10 12
White families	119	4. 65	2,000	62	.6	11	5, 100	106	1.8	1.9	13
Owners, renters Share croppers, la-	75	4.68	2, 300	73	.7	12	6,000	120	2.1	2.2	15
borers	44	4. 62	1,400	43	.4	9	3, 400	82	1.3	1.3	10
Negro families	130	4. 91	1,200	35	.3	7	4, 400	85	1, 2	1.1	8
Owners, renters Share croppers, la-	51	5, 22	1,600	45	.5	9	6, 200	108	1.5	1.5	10
borers	79	4.71	1,000	29	.2	6	3,000	69	1.0	.8	7
Nonfarm families	32	3.83	500	18	.2	3	1,800	52	.5	.6	4
White Negro	16 16	3. 85 3. 82	700 300	24 13	.2	4 2	2,500 1,200	60 44	.6	.7	6 3
COUNTY IN OHIO											
All families	4 237	3, 53	1,520	51	.7	6	4, 400	55	1.0	1.8	7
Farm families	4 201	3. 54	1, 640	55	.8	7	4,600	58	1.1	1.9	8
\$0-\$494 \$495-\$994 \$995 or more	22 43 114	3. 19 3. 84 3. 48	1, 260 1, 510 1, 700	41 49 57	.6 .7 .8	5 6 7	3,700 3,800 4,800	49 51 57	.8 1.1 1.1	1.6 1.7 2.0	5 6 8
\$995–\$1,994 \$1,995–\$2,994 \$2,995 or more	25	3, 46 3, 48 3, 54	1, 586 1, 860 1, 840	53 59 66	.8	6 7 8	4, 300 5, 300 5, 800	51 54 73	1.0 1.1 1.2	1. 9 2. 0 2. 2	7 8 11
Nonfarm families	32	3, 55	560	19	.3	3	2, 400	29	.3	.8	2

Without adjustment for nutrient loss in preparation and cooking of food. Averages are based on the total number of families in each class (col. 2).
 Represents household size in 21-meal-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person, regardless of sex, age, or physical activity and fewness of meals consumed by individuals. To compute household size in persons, total meals were divided by 21

divided by 21.

The National Research Council's recommended dietary allowances for the moderately active man were considered equal to one nutrition unit; allowances for other sex-age-physical activity groups were expressed in relation to these.

4 Includes some families with negative incomes and with income or farm tenure unknown, not shown

separately.

Table 4.—Household size of families in equivalent persons and nutrition units, averages for open-country families in a Georgia county and an Ohio county, early summer 1945

		Average household size									
Location, occupation, net cash family income for year, race,	Equiva-	Equivalent nutrition units ¹									
and farm tenure	lent per- sons ²	Food energy	Pro- tein	Cal- cium	Iron	Vita- min A value	Ascorbic acid		Ribo- flavin	Nia- cin	
COUNTY IN GEORGIA All families 3	Num- ber 4.67	Num- ber 3.83	Num- ber 4.32	Num- ber 5.71	Num- ber 4. 43	Num- ber 4.06	Num- ber 4.32	Num- ber 3. 76	Num- ber 3.95	Num- ber 3.76	
Farm families 3	4.79	3.95	4. 44	5. 87	4. 55	4. 20	4. 47	3.89	4. 09	3. 89	
\$0-\$494 \$495-\$994 \$995 or more	. 5.17	3. 44 4. 28 4. 28	3. 87 4. 83 4. 82	5. 14 6. 41 6. 28	3. 98 4. 94 4. 95	3. 68 4. 54 4. 56	3. 92 4. 82 4. 84	3. 40 4. 21 4. 21	3. 56 4. 43 4. 43	3, 40 4, 21 4, 21	
White families	4.65	3.85	4. 29	5. 61	4. 41	4.07	4. 29	3.78	3.95	3. 78	
Owners, renters Share croppers, la-	4.68	3.84	4. 26	5. 54	4. 40	4.09	4. 28	3.77	3.94	3.77	
borers	4. 62	3. 87	4.34	5.74	4.41	4.03	4. 30	3. 79	3. 97	3. 79	
Negro families	4. 91	4.04	4. 59	6.11	4. 69	4. 31	4. 63	3. 99	4. 22	3.99	
Owners, renters Share croppers, la-	5. 22	4. 24	4.88	6.46	5.01	4. 59	4. 91	4. 20	4.46	4. 20	
borers	4.71	3. 92	4. 40	5. 89	4.48	4. 14	4.45	3, 86	4.07	3, 86	
Nonfarm families	3. 83	2. 93	3. 38	4. 58	3. 52	3. 20	3. 37	2. 92	3.07	2.92	
White Negro		2. 94 2. 92	3. 45 3. 32	4. 61 4. 54	3, 63 3, 42	3. 26 3. 14	3, 43 3, 32	2. 93 2. 90	3. 08 3. 06	2. 93 2. 90	
COUNTY IN OHIO											
All families 3	3. 53	2.94	3. 25	4.10	3. 39	3.15	3. 25	2. 89	3.00	2.89	
Farm families 3	3. 54	2.98	3. 28	4.10	3. 42	3. 19	3. 28	2, 93	3.03	2.93	
\$0-\$494 \$495-\$994 \$995 or more	.! 3, 84	2. 54 3. 15 2. 98	2.85 3.47 3.28	3. 62 4. 46 4. 05	2. 98 3. 60 3. 42	2.76 3.34 3.19	2, 84 3, 46 3, 28	2. 51 3. 09 2. 93	2. 60 3. 21 3. 03	2. 51 3. 09 2. 93	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	.! 3.48	2.91 3.03 3.12	3. 24 3. 28 3. 40	4. 03 4. 05 4. 06	3. 36 3. 43 3. 56	3. 14 3. 19 3. 32	3. 23 3. 28 3. 41	2.86 2.97 3.06	2. 97 3. 07 3. 15	2. 86 2. 97 3. 06	
Nonfarm families	3. 55	2. 67	3. 14	4.18	3. 26	3.00	3.14	2. 66	2. 81	2. 66	

¹ Represents household size in 21-meal-equivalent persons in terms of the National Research Council's reommended dietary allowances (1945) for calories and each of 8 nutrients for the moderately active man. Dietary allowances of the moderately active man were considered equal to 1 nutrition unit; the needs of other sex-age-activity groups were expressed in relation to those of the moderately active man. To compute household size in nutrition units, meals for persons of each sex-age-physical activity group were multiplied by factors indicating their relative recommended allowances, the results were added, and the total was

² Represents household size in 21-meal-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person, regardless of sex, age, or physical activity and fewness of meals consumed by individuals. To compute household size in persons, total meals were divided by 21.

³ Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 5.—Over-all quality of diets, distributions of open-country families in a
Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure		Diets in which least satisfactory dietary essential provides specified percent of NRC recommended allowance ¹					
Majorin vester		100 or more	67-99	34-66	33 or less		
COUNTY IN GEORGIA All families	Number 2 282	Percent 28	Percent 22	Percent 33	Percent 17		
Farm families	2 249	29	22	33	16		
Family income of: \$0-\$494 \$495-\$994 \$995 or more. Per person income of:	94 97 48	27 27 40	15 26 31	37 28 27	21 19 2		
\$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294	42 53 41 36	13 29 28 24 33	13 17 19 27 28	54 33 30 34 22	20 21 23 15 17		
\$295 or more Families of: 2 persons 3 persons 4 persons 5 persons 6 persons 7 persons	46 34 39 32	46 39 24 30 19	30 21 20 31 23 31 10	24 23 24 24 26 34 70	10 17 21 21 16 15		
Families of: Adults only Adults and children 20 years or under		54 23	17 24	23 35	6 18		
With one or more children 6 years or under		21 27 40	21 29 30	43 21 25	15 23 5		
Owners, renters		49	33	17	1		
Share croppers, laborers	44	25	25	39	11		
Negro families	130	20	15	39	26		
Owners, renters Share croppers, laborers	51 79	31 13	18 14	43 35	8 38		
Nonfarm families	32	16	19	43	22		
WhiteNegro	16 16	25 6	25 12	44 44	6 38		
Confestuates at and of table	J.	l l			1		

Table 5 .- Over-all quality of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945-Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race,	Families	dietar; percen	atisfactory s specified mmended		
and farm tenure		100 or more	67-99	34-66	33 or Ass
COUNTY IN OHIO All families.	Number 2 237	Percent 40	Percent 37	Percent 19	Percent 4
Farm families.	2 201	42	38	19	1
Family income of: \$0-\$494. \$495-8994 \$995 or more.	22 43 114	18 30 49	50 37 38	27 28 13	5 5 0
\$995-\$1,994. \$1,995-\$2,994. \$2,995 or more.	65 25 24	45 48 63	37 44 33	18 8 4	0 0 0
Per person income of: \$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1, 244 \$1, 245 or more	10 31 22 39 34 22 20	30 6 36 36 65 50	40 46 37 44 29 45	30 42 27 18 6 5	0 6 0 2 0 0
Families of: 2 persons. 3 persons. 4 persons. 5 persons. 6 persons. Families of:	65 48 34	63 43 26 18 27	26 40 59 53 27	8 17 15 29 37	3 0 0 0 0 9
Adults onlyAdults and children 20 years or under	72 129	55 35	32 41	12 22	1 2
With one or more children 6 years or under. With no children 6 years or under.	66 63	36 33	38 44	24 21	2 2
Nonfarm families	32	25	37	19	19

¹ Without adjustment for nutrient loss in preparation and cooking of food. Nutritive value of a family's diet was related to recommended allowances of the National Research Council (1945) proper for sex, age, and physical activity, separately for food energy value and each of 8 nutrients. Diet was then classified by the dietary essential satisfying recommended allowances least, into 1 of the 4 categories given. See table 39 for absolute figures for each dietary essential.

2 Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 6.—Food energy value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure	Families	Diets furnishing food energy value within specified cal- ories per nutrition unit per day ¹			
to year, one and one participation of the participa		3,000 or more	2,010- 2,990	990-2,000	
COUNTY IN GEORGIA	Number 2 282	Percent 69	Percent 21	Percent 10	
Farm families	2 249	69	21	10	
Family income of: \$0-\$494 \$495-\$994 \$995 or more Per person income of:	94 97 48	66 65 81	23 23 17	11 12 2	
\$0-\$44. \$45-\$94. \$95-\$144. \$145-\$194. \$195-\$294.	42	50 60 66 66 77 92	33 21 26 24 17 8	17 19 8 10 6	
Families of:	46 34 39 32	90 79 76 74 63 25	10 17 18 13 25 45	0 4 6 13 12 30	
Families of: Adults only		90 64	10 24	0 12	
With one or more children 6 years or under With no children 6 years or under	124 77	60 69	27 19	13 12	
White families	119	81	15	4	
Owners, rentersShare croppers, laborers		85 73	12 20	3 7	
Negro families	130	58	27	15	
Owners, renters	51 79	69 50	25 28	6 22	
Nonfarm families	32	72	16	12	
White Negro	16 16	75 69	19 12	6 19	
See footnotes at end of table.	1	1	1	1	

Table 6.—Food energy value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 19/5—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure		Diets furnishing food energy value within specified cal ories per nutrition unit per day ¹			
		3,000 or more	2,010- 2,990	990-2,000	
COUNTY IN OHIO All families	Number 2 237	Percent 78	Percent 19	Percent 3	
Farm families	2 201	78	19	3	
Family income of: \$0-\$494 \$495-\$994 \$995 or more	22 43 114	77 72 78	23 23 18	0 5 4	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	72 84 88	25 12 8	3 4 4	
\$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more Families of:	10 31 22 39 34 22 20	70 68 82 64 85 82 90	30 29 14 31 12 18 5	0 3 4 5 3 0 5	
2 persons. 3 persons. 4 persons. 5 persons. 6 persons.	65 48 34 28 11	92 88 56 75 64	6 8 44 18 36	2 4 0 7 0	
Families of: Adults only Adults and children 20 years or under	72 129	87 72	10 25	3 3	
With one or more children 6 years or under With no children 6 years or under	66 63	69 74	29 21	2 5	
Nonfarm families	32	69	22	9	

Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, and 34 to 66 percent of NRC recommended allowances.
 Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 7.—Protein value of diets, distributions of open-country families in a
Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm	Families	Diets furnishing protein with- in specified grams per nutri- tion unit per day ¹				
tenure		70 or more	47-69	23-46		
COUNTY IN GEORGIA	Number	Percent	Percent	Percent		
All families		73	19	8		
Farm families	2 249	74	18	8		
Family income of:	94 97 48	73 66 88	17 24 8	10 10 4		
\$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294 \$295 or more	42 53 41 36	53 64 74 76 75 95	27 26 15 17 19 5	20 10 11 7 6		
Families of: 2 persons. 3 persons. 4 persons. 5 persons. 6 persons. 7 persons.	39 46 34 39 32	95 85 79 77 75 25	5 13 18 13 16 55	0 2 3 10 9 20		
Families of: Adults only Adults and children 20 years or under	48 201	94 69	6 21	0 10		
With one or more children 6 years or under With no children 6 years or under	124 77	65 75	24 16	11 9		
White families	119	85	13	2		
Owners, rentersShare croppers, laborers	75 44	90 80	9 18	1 2		
Negro families	130	62	23	15		
Owners, rentersShare croppers, laborers	51 79	70 57	24 23	6 20		
Nonfarm families	32	66	25	9		
White Negro	16 16	75 57	19 31	6 12		

Table 7.—Protein value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm	Families	Diets furnishing protein with- in specified grams per nutri- tion unit per day ¹			
tenure		70 or more	47-69	23-46	
COUNTY IN OHIO All families	Number 2 237	Percent 87	Percent 11	Percent 2	
Farm families	2 201	90	9	1	
Family income of: \$0-\$494. \$405-\$094. \$905 or more.	22 43 114	91 86 90	9 14 8	0 0 2	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	65 25 24	88 92 96	9 8 4	3 0 0	
Per person income of: \$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more Families of:	10 31 22 39 34 22 20	80 87 81 87 94 95 95	20 10 14 13 6 5 5	0 3 5 0 0	
2 persons. 3 persons. 4 persons. 5 persons. 6 persons. Families of:	65 48 34 28 11	98 94 82 85 73	2 6 18 11 27	0 0 0 4 0	
Adults only Adults and children 20 years or under	72 129	94 87	6 11	0 2	
With one or more children 6 years or under With no children 6 years or under.	66 63	86 88	12 10	2 2	
Nonfarm families	32	66	25	9	

Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, and 34 to 66 percent of NRC recommended allowances.
 Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 8.—Calcium value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure	Families	Diets furnishing calcium within specified milligrams per nutrition unit per day ¹					
and farm tenure		800 or more	536-799	264-535	263 or less		
COUNTY IN GEORGIA All families	Number 2 282	Percent 52	Percent 23	Percent 20	Percent 5		
Farm families.	2 249	55	23	18	4		
Family income of: \$0-\$494 \$495-\$994 \$995 or more Per person income of:	. 97	53 54 63	19 26 25	23 15 12	5 5 0		
\$0-844 \$45-894 \$95-\$144 \$145-\$194 \$195-\$294 \$295 or more	42 53 41 36	30 45 58 51 61 78	20 19 23 34 28 14	43 26 15 10 11 8	7 10 4 5 0		
Families of: 2 persons. 3 persons. 4 persons. 5 persons. 6 persons. 7 persons. Families of:	46 34 39 32	92 67 53 49 34 20	3 22 32 28 34 25	5 7 15 18 16 50	0 4 0 5 16 5		
Adults only	48 201	94 45	4 28	2 22	0 5		
With one or more children 6 years or under With no children 6 years or under.	124 77	37 59	31 22	27 14	5 5		
White families	119	63	22	14	1		
Owners, rentersShare croppers, laborers	75 44	74 45	16 32	9 23	1 0		
Negro families	130	46	25	22	7		
Owners, rentersShare croppers, laborers	51 79	58 40	24 25	16 25	2 10		
Nonfarm families	32	41	19	31	9		
White Negro	16 16	44 38	25 12	25 38	6 12		

Table 8.—Calcium value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race,	Families	Diets furnishing calcium within specified milligrams per nutrition unit per day ¹				
and farm tenure		800 or more	536-799	264-535	263 or less	
COUNTY IN OHIO All families	Number 2 237	Percent 68	Percent 22	Percent 10	Percent 0	
Farm families	2 201	72	21	7	0	
Family income of: \$0-\$494. \$495-8994. \$995 or more.	22 43 114	54 60 77	27 33 17	19 7 6	0 0 0	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	77 72 88	17 24 8	6 4 4	0 0 0	
\$0-\$04 \$95-\$104 \$195-\$204 \$295-\$404 \$495-\$744	10 31 22 39 34	60 42 59 69 88	30 39 32 28 6	10 19 9 3 6	0 0 0 0	
\$745 - \$1,244 \$1,245 or more	22 20	100 85	0	0 5	0	
Families of: 2 persons. 3 persons. 4 persons. 5 persons.	65 48 34 28	84 84 62 43	11 10 32 46	5 6 6 11	0 0 0	
6 persons Families of:	11	46	45	9	0	
Adults onlyAdults and children 20 years or less	72 129	86 63	10 28	9	0	
With one or more children 6 years or under	66 63	56 70	33 22	11 8	0 0	
Nonfarm families	32	47	28	22	3	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, 34 to 66 percent, and 33 percent or less of NRC recommended allowances, ² Includes some families with negative incomes and with income or farm tenure unknown, not shown separately.

Table 9.—Iron value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm	Families	Diets furnishing iron within specified milligrams per nu- trition unit per day ¹			
tenure		12.0 or more	8.0-11.9	4.0-7.9	
COUNTY IN GEORGIA	Number 2 282	Percent 88	Percent 10	Percent 2	
Farm families	2 249	89	* 9	2	
Family income of:	94 97 48	90 88 90	7 11 10	3 1 0	
\$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294 \$295 or more	30 42 53 41 36 37	80 86 85 93 92 97	13 12 13 7 8	7 2 2 0 0	
Families of: 2 persons 3 persons 4 persons 5 persons 6 persons. 7 persons	39 46 34 39 32 20	97 96 94 87 94 70	3 4 3 10 6 20	0 0 3 3 0 10	
Families of: Adults only Adults and children 20 years or under	48 201	100 87	0 11	0 2	
With one or more children 6 years or under With no children 6 years or under	124 77	86 89	12 10	2 1	
White families	119	95	5	0	
Owners, rentersShare croppers, laborers	75 44	95 95	5 5	0	
Negro families	130	84	13	3	
Owners, rentersShare croppers, laborers	51 79	92 78	6 18	2 4	
Nonfarm families	32	85	12	3	
White	16 16	88 82	12 12	0 6	

Table 9.—Iron value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure	Families	Diets furnishing iron within specified milligrams per nu- trition unit per day ¹			
for year, size and composition of family, race, and familitenare		12.0 or more	8.0-11.9	4.0-7.9	
COUNTY IN OHIO All families	Number 2 237	Percent 88	Percent 10	Percent 2	
Farm families	2 201	91	8	1	
Family income of: \$0-\$494 \$495-\$994 \$995 or more	22 43 114	100 93 87	0 5 11	0 2 2	
\$995-\$1,994. \$1,995-\$2,994 \$2,995 or more.	65 25 24	87 88 88	11 12 8	2 0 4	
Per person income of: \$0-894 \$95-\$194 \$195-\$294 \$295-\$494 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more.	10 31 22 39 34 22 20	100 94 91 80 94 100 90	0 6 9 15 6 0 5	0 0 5 0 0 5	
Families of: 2 persons. 3 persons. 4 persons. 5 persons. 6 persons.	65 48 34 28 11	98 96 82 75 91	0 4 18 18 9	2 0 0 7 0	
Families of: Adults only Adults and children 20 years or under.	72 129	96 87	3 11	$\frac{1}{2}$	
With one or more children 6 years or under With no children 6 years or under	66 63	87 87	11 11	2 2	
Nonfarm families	32	75	22	3	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, and 34 to 35 percent of NRC recommended allowances.

² Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 10.—Ascorbic acid value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race,	Fami-	in spe	rnishing a cified mil nit per d	ascorbic a lligrams p	cid with- per nutri-
and farm tenure	lies	75 or more	50-74	25-49	24 or less
COUNTY IN GEORGIA	Number 2 282	Percent 70	Percent 16	Percent 12	Percent 2
Farm families	2 249	70	16	12	2
Family income of: \$0-\$494. \$495-\$994. \$995 or more.	94 97 48	66 70 73	15 18 17	16 9 10	3 3 0
Per person income of: \$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294	30 42 53 41 36	70 64 60 76 69	7 19 17 20	23 10 19 2 14	0 7 4 2 0
\$295 or more	37	79 74 79 76	16 10 17 12	13 2 12	3 2 0
4 persons 5 persons 6 persons 7 persons Families of:	39 32 20	56 68 50	21 16 25	18 16 25	5 0 0
Adults onlyAdults and children 20 years or under	48 201	86 66	4 19	8 13	2 2
With one or more children 6 years or under With no children 6 years or under	124 77	61 72	19 19	18 5	2 4
White families	119	83	14	3	0
Owners, rentersShare croppers, laborers	75 44	88 73	12 18	0	0
Negro families.	130	57	18	20	5
Owners, renters Share croppers, laborers	51 79	74 46	12 22	14 24	0 8
Nonfarm families	32	72	16	12	0
WhiteNegro		82 63	6 2 5	12 12	0 0

Table 10.—Ascorbic acid value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

	Fami-	Diets furnishing ascorbic acid with- in specified milligrams per nutri- tion unit per day ¹				
and farm tenure	lies	75 or more	50-74	25-49	24 or less	
COUNTY IN OHIO All families.	Number 2 237	Percent 72	Percent 16	Percent 9	Percent 3	
Farm families	2 201	75	16	8	1	
Family income of: \$0-\$494 \$495-\$994 \$995 or more	22 43 114	68 68 76	9 16 19	18 14 5	5 2 0	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more- Per person income of:	65 25 24	69 80 92	25 20 4	6 0 4	0 0 0	
\$0-\$94 \$05-\$194 \$195-\$294 \$295-\$494 \$495-\$744	10 31 22 39 34 22	60 61 73 64 82 82	10 13 27 23 18	30 23 0 10	0 3 0 3 0	
\$745-\$1,244 \$1,245 or more	20	90	18 5	5	0	
Families of:	65 48 34 28 11	83 80 65 72 64	9 10 32 21 9	5 10 3 7 27	3 0 0 0	
Families of: Adults only	72 129	76 72	15 18	8 9	1 1	
With one or more children 6 years or under_ With no children 6 years or under	66 63	76 68	12 24	12 6	0 2	
Nonfarm families	32	60	19	9	12	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, 34 to 66 percent, and 33 percent or less of NRC recommended allowances. ² Includes some families with negative incomes and with income or farm tenure unknown, not shown separately.

Table 11.—Vitamin A value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

comes for year, size and composition of family, race, and	Fami-	Diets furnishing vitamin A value within specified Internationa Units per nutrition unit per day				
farm tenure	1100	5,000 or more	3,350- 4,990	1,650- 3,340	1,640 or less	
COUNTY IN GEORGIA	Number 2 282	Percent 43	Percent 18	Percent 26	Percent 13	
Farm families	2 249	44	19	24	13	
Family income of:	94	39	14	29	18	
	97	40	23	23	14	
	48	60	17	23	0	
\$0-\$44	30	30	23	30	17	
\$45-\$94	42	45	12	24	19	
\$95-\$144	53	42	13	26	19	
\$145-\$194	41	42	17	34	7	
\$195-\$294	36	45	22	19	14	
\$295 or more	37	60	24	16	0	
Families of: 2 persons	39	56	15	21	8	
	46	46	15	24	15	
	34	35	26	21	18	
	39	40	21	21	18	
	32	44	28	16	12	
	20	25	15	50	10	
Families of: Adults only Adults and children 20 years or under	48	60	15	21	4	
	201	40	20	25	15	
With one or more children 6 years or under.	124	38	21	29	12	
With no children 6 years or under.	77	44	18	19	19	
White families	119	53	26	17	4	
Owners, renters	75	64	24	12	0	
Share croppers, laborers	44	34	30	25	11	
Negro families	130	35	12	32	21	
Owners, renters	51	47	14	33	6 30	
Share croppers, laborers	79	29	11	30		
Nonfarm families	32	38	12	34	16	
White	16	69	12	19	0	
Negro	16	6	12	51	31	

Table 11.—Vitamin A value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and	Fami-	Diets furnishing vitamin A value within specified International Units per nutrition unit per day ¹				
farm tenure	nes	5,000 or more	3,350- 4,990	1,650- 3,340	1,640 or less	
COUNTY IN OHIO All families	Number 2 237	Percent 70	Percent 20	Percent 9	Percent 1	
Farm families.	2 201	74	20	6	0	
Family income of: \$0-\$494. \$495-\$994. \$995 or more.	22 43 114	63 63 78	32 23 17	5 14 5	0 0 0	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	72 84 88	20 16 8	8 0 4	0 0 0	
\$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more Families of:	10 31 22 39 34 22 20	50 64 59 66 88 77 90	40 23 27 26 12 18	10 13 14 8 0 5	0 0 0 0 0	
2 persons. 3 persons. 4 persons. 5 persons. 6 persons. 6 persons. 7 amilies of:	65 48 34 28 11	87 71 70 50 91	11 27 24 36 0	2 2 6 14 9	0 0 0 0	
Adults only	72 129	79 70	17 22	4 8	0	
With one or more children 6 years or under With no children 6 years or under	66 63	71 68	21 24	8 8	0 0	
Nonfarm families	32	57	19	18	6	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, 34 to 66 percent, and 33 percent or less of NRC recommended allowances.

² Includes some families with negative incomes and with income or farm tenure unknown, not shown separately.

Table 12.—Thiamine value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net eash family and per person incomes for year, size and composition of family, race, and farm tenure	• Families	Diets furnishing thiamine within specified milligrams per nutrition unit per day			
101 year, size and composition or family, race, and fair wenter		1.50 or more	1.00-1.49	0.50-0.99	
COUNTY IN GEORGIA	Number 2 282	Percent 96	Percent 4	Percent	
Farm.families	2 249	96	4		
Family income of: \$0-\$494 \$495-\$994 \$995 or more. Per person income of:	94 97 48	95 94 100	5 6 0		
\$0 -\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294 \$295 or more	30 42 53 41 36 37	90 93 94 98 97	10 7 6 2 3 0		
Families of:	39 46 34 39 32 20	100 98 97 95 94 85	0 2 3 5 6		
Families of: Adults only	48 201	100 95	0 5		
With one or more children 6 years or under With no children 6 years or under	124 77	94 96	6 4		
White families	119	99	1		
Owners, rentersShare croppers, laborers	75 44	99 100	1 0		
Negro families	130	92	8		
Owners, rentersShare croppers, laborers	51 79	98 89	2 11		
Nonfarm families	32	97	3		
White Negro	16 16	94 100	6 0		

Table 12.—Thiamine value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm tenure	Families	Diets furnishing thiamine within specified milligrams per nutrition unit per day ¹			
101 year, size and composition or fainty, face, and fain what		1.50 or more	1.00-1.49	0.50-0.99	
COUNTY IN OHIO	Number 2 237	Percent 86	Percent 12	Percent 2	
Farm families	2 201	87	11	2	
Family income of: \$0-\$494. \$495-\$994. \$995 or more.	22 43 114	95 89 83	5 9 14	0 2 3	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	82 84 88	15 16 8	3 0 4	
\$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more. Families of:	10 31 22 39 34 22	100 87 86 82 91 77 85	0 10 14 13 9 23 10	0 3 0 5 0 0 5	
2 persons. 3 persons. 4 persons. 5 persons. 6 persons. Families of:	65 48 34 28 11	92 92 76 82 82	6 8 21 14 18	2 0 3 4 0	
Adults only	72 129	87 87	12 11	1 2	
With one or more children 6 years or under With no children 6 years or under	66 63	87 86	11 11	2 3	
Nonfarm families	32	78	16	6	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, and 34 to 66 percent of NRC recommended allowances.

² Includes some families with negative incomes and with income or farm tenure unknown, not shown

Table 13.—Riboflavin value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Location, occupation, net cash family and per person incomes for year, size and composition of family, race, and farm ten-	Families	Diets furnishing riboflav within specified milligran per nutrition unit per day			
ure		2.00 or more	1.34-1.99	0.66-1.33	
COUNTY IN GEORGIA All families	Number 2 282	Percent 58	Percent 29	Percent 13	
Farm families	2 249	61	26	13	
Family income of:	94 97 48	54 60 73	31 26 21	15 14 6	
\$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194 \$195-\$294 \$295 or more	30 42 53 41 36 37	44 52 62 56 61 83	33 31 21 34 31 14	23 17 17 10 8 3	
Families of: 2 persons. 3 persons. 4 persons. 5 persons. 6 persons. 7 persons.		84 63 67 59 56 20	13 30 21 26 28 55	3 7 12 15 16 25	
Families of: Adults only	48 201	86 55	12 30	2 15	
With one or more children 6 years or under With no children 6 years or under	124 77	53 59	31 27	16 14	
White families	119	74	19	7	
Owners, rentersShare croppers, laborers	75 44	84 57	12 32	4 11	
Negro families	130	49	33	18	
Owners, rentersShare croppers, laborers	51 79	61 41	29 35	10 24	
Nonfarm families	32	41	47	12	
WhiteNegro	16 16	62 19	38 56	0 25	

Table 13.—Riboflavin value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

Location, occupation, net cash family and per person incomes		Diets furnishing riboflavin within specified milligrams per nutrition unit per day ¹			
for year, size and composition of family, race, and farm tenure	Families	2.00 or more	1.34-1.99	0.66-1.33	
COUNTY IN OHIO	Number 2 237	Percent 78	Percent 18	Percent 4	
Farm families	2 201	83	16	1	
Family income of: \$0-\$494 \$495-\$994 \$995 or more	22 43 114	59 79 85	41 19 13	0 2 2	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	83 84 92	14 16 8	3 0 0	
\$0-\$04 \$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more Families of:	10 31 22 39 34 22 20	70 62 81 77 88 100 90	30 35 14 20 12 0 10	0 3 5 3 0 0	
2 persons. 3 persons. 4 persons. 5 persons. 6 persons. Families of:	65 48 34 28 11	89 86 71 78 73	11 12 26 18 27	0 2 3 4 0	
Adults onlyAdults and children 20 years or under	72 129	87 78	10 20	3 2	
With one or more children 6 years or under With no children 6 years or under	66 63	80 76	18 22	2 2	
Nonfarm families	32	57	28	15	

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, and 34 to 66 percent of NRC recommended allowances.

² Includes some families with negative incomes and with income or farm tenure unknown, not shown separately.

Table 14.—Niacin value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945

Comes for Jear, Size and Composition	Families	*Diets furnishing niacin within speci- fied milligrams per nutrition unit per day ¹				
and farm tenure		15.0 or more	10.0-14.9	5.0-9.9	4.9 or less	
COUNTY IN GEORGIA All families	Number 2 282	Percent 88	Percent 11	Percent 1	Percent	
Farm families	2 249	89	10	1	0	
Family income of: \$0-\$494 \$495-\$994 \$995 or more	94 97 48	89 87 94	10 12 6	1 1 0	0 0 0	
Per person income of: \$0-\$44 \$45-\$94 \$95-\$144 \$145-\$194	42 53 41	80 86 89 93	17 12 11 7	3 2 0 0	0 0 0 0	
\$195-\$294 \$295 or more	37 39 46	92 95 97 98	8 5 3 2	0 0	0 0	
4 persons	39 32 20	97 90 84 75	3 10 16 20	0 0 0 5	0 0 0 0	
Adults onlyAdults and children 20 years or under	48 201	98 87	2 12	0	0	
With one or more children 6 years or under	124 77	85 90	14 9	1	0	
White families	119	97	3	0	0	
Owners, rentersShare croppers, laborers	75 44	97 95	3 5	0	. 0	
Negro families	130	82	16	2	0	
Owners, rentersShare croppers, laborers	51 79	94 74	6 23	0 3	0	
Nonfarm families	32	81	19	0	0	
White Negro	16 16	88 75	12 25	0	0	

Table 14.—Niacin value of diets, distributions of open-country families in a Georgia county and an Ohio county, early summer 1945-Continued

Location, occupation, net cash family and per person incomes for year, size and composition of family, race,	Families		rnishing r illigrams y ¹		
and farm tenure		15.0 or more	10.0-14.9	5.0-9.9	4.9 or less
COUNTY IN OHIO All families	Number 2 237	Percent 75	Percent 21	Percent 4	Percent (3)
Farm families	2 201	78	19	3	0
Family income of: \$0-\$494. \$495-\$994. \$995 or more.	22 43 114	77 65 79	23 30 16	0 5 5	0 0 0
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more Per person income of:	65 25 24	77 84 84	18 12 12	5 4 4	0 0 0
\$0-\$94 \$95-\$194 \$195-\$294 \$295-\$494 \$495-\$744 \$745-\$1,244 \$1,245 or more Families of:	10 31 22 39 34 22 20	60 65 68 74 85 86 85	40 29 23 23 15 9	0 6 9 3 0 5	0 0 0 0 0 0
2 persons	65 48 34 28 11	94 83 68 68 64	6 15 32 25 27	0 2 0 7 9	0 0 0 0
Adults only Adults and children 20 years or under	72 129	85 73	14 22	1 5	0
With one or more children 6 years or under With no children 6 years or under	66 63	71 77	26 17	3 6	0 0
Nonfarm families	32	57	34	6	3

¹ Without adjustment for nutrient loss in preparation and cooking of food. Class intervals represent 100 percent or more, 67 to 99 percent, 34 to 66 percent, and 33 percent or less of NRC recommended allowances.

² Includes some families with negative incomes and with income or farm tenure unknown, not shown separately.

3 Less than 0.5 percent.

Table 15.—Quantity of food from all sources and from home production, in terms of 11 food groups, averages for open-country families in a Georgia county and an Ohio county, early summer 1945

													1
		ļ		1		A verage qu	tantity of f	Average quantity of food consumed per person per week 1	ed per per	son per we	ek 1		
Location, occupation, net cash family income for year, race, and farm tenure	Families	hold size in equivalent alent persons 2	Milk ³	Fats, oils 4	Eggs	Meat, poultry, fish	Dry beans and peas, nuts 5	Potatoes, sweet- potatoes	Tomatoes, citrus fruit	Green and yellow vege- tables	Other vegetables and fruits 6	Grain prod- ucts 7	Sugars, other sweets 8
							Fre	From all sources	ses				
COUNTY IN GEORGIA All families	Number 9 282	Number 4.67	Quarts 2.61	Pounds 1.12	Dozen 0.39	Pounds 1.85	Pounds 0.05	Pounds 0.67	Pounds 1.08	Pounds 3.13	Pounds 8.52	Pounds 4.74	Pounds 1.27
Farm families	9 249	4.79	2.71	1.10	.39	1.87	.04	.67	1.10	3.16	9.01	4.78	1.29
\$0-\$494 \$495-\$994 \$995 or more.	94 97 48	4.24 5.17 5.13	2. 20 2. 63 3. 73	1.05 1.15 1.15	.35	1.65 1.81 2.41	.05 .05	.54	. 94 1.19 1.34	3.06 3.23 2.85	8.99 8.26 10.74	4.97 4.65 4.69	1.21 1.36 1.49
White families	119	4.65	3.52	1. 24	. 52	2.30	.05	.83	1.58	3, 45	7.63	4.74	1.40
Owners, renters	75	4.68	4.20	1.25	. 57	2.48	.09	.94	1.81	3.42	8.06	4.77	1.43
Negro families	130	4.91	1.93	86.	. 27	1.52	.02	. 48	.67	2.90	10.19	4.78	1.18
Owners, renters	51 79	5. 22	2.64	1.01	.35	1.49	.01	. 53	.81	3.44	12.69	5.18	1.23
Nonfarm families	32	3.83	1.56	1.23	. 44	1.65	80.	02.	77.	2.82	3.76	4.37	1.15
White.	16	3.85	2. 22	1.31	8.8	2.01	.10	.77	1.27	3.02	4.54	3.90	1.14

	1.39	1.39	1.39	1.57	1.24		0.40	. 43	.31.47	. 49	. 53	.37	. 46	01.	.02	
	3, 38	3.37	3.24	3. 26 3. 07 3. 47	3. 19		0.72	. 40	.85 .73 1.00	. 53	1.00	.67	.68	. 02	.05	
_	3.74	3.81	3.24	3.70 3.30 4.46	3, 28		7.61	8.22	8. 20 7. 29 8. 05	6.97	7.54	9.37	12.55	1.72	2.49	
	2.07	2. 12	1.90	1.93 2.51 2.88	1.53		2.78	2.90	2.79 2.91 2.71	3.17	3.32	2.65	3, 33	1.58	1.58	
	1.61	1.64	1.63 1.26 1.74	1.53	1. 27	uction	0.88	. 93	1.10	1.31	1.60	. 58	5.3	. 48	. 18	
	2, 16	2.25	22.15	2. 21 2. 06 1. 87	1.67	From home production	0.51	52	8.5.9.	89.	. 54	.39	12 E	.35	.39	
	. 50	. 49	.55 .59	. 45 . 40 . 32	. 58	From	(ei)	(01)	EEE	(10)	(et)	(01)	0.01	0	00	
	1.83	1.96	1. 19 1. 64 2. 08	2.20	1.12		1.00	1.06		1.47	1. 79	.69	.86	.39	. 55	
	.72	.74	.59	.76 .82 .87	. 59		0.34	.35	.33 .45	.46	.54	. 25	.34	. 20	. 28	
	11.11	1.14	. 95 1. 11 1. 15	1.07 1.22 1.28	16.		0.55	. 55	. 48	17.	. 55 . 50 . 50	. 46	. 52	. 15	. 20	
	5.59	5.78	4.93 5.17 6.09	6.01 6.01 6.46	4.17		2.16	2.31	1.84 2.18 3.34	3, 22	4.04	1.48	2.29	. 93	88.	
	3, 53	3, 54	8.8.8. 28.8.48	3.8.8 5.45 5.45	3, 55		4.67	4.79	4.24 5.17 5.13	4.65	4.62	4.91	5, 22	3, 83	3.85	
_	9 237	9 201	22 43 114	25 24 24	32		9 282	9 249	94 97 48	119	7.5	130	51	32	16	
COUNTY IN OHIO	All families	Farm families	\$0-\$494 \$495-\$894 \$995 or more	\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	Nonfarm families	COUNTY IN GEORGIA	All families	Farm families	\$0-\$494 \$495-\$994 \$995 or more	White families	Owners, renters	Negro families	Owners, renters	Nonfarm families	White	See footnotes at end of table.

Table 15.—Quantity of food from all sources and from home production, in terms of 11 food groups, averages for open-country families in a Georgia country and an Ohio country, early summer 1945.—Continued

		Пошер				Average qu	Average quantity of food consumed per person per week ¹	ood consur	ned per pe	rson per we	eek 1		
Location, occupation, net cash family income for year, race, and farm tenure	Families	hold size in equivalent alent persons ²	Milk 3	Fats, oils 4	Eggs	Meat, poultry, fish	Dry beans and peas, nuts 5	Potatoes, sweet- potatoes	Toma- toes, citrus fruit	Green and yellow vege- tables	Other vege-tables and fruits 6	Grain prod uets 7	Sugars, other sweets 8
CARROLL AND ADMINISTRATION OF							From	From home production	luction				
All families.	Number § 237	Number 3. 53	Quarts 4.44	Pounds 0.61	Dozen 0.66	Pounds 1.32	Pounds 0.03	Pounds 0.88	Pounds 0.46	Pounds 1.33	Pounds 1.85	Pounds 0.07	Pounds 0.22
Farm families	9 201	3.54	4.83	69.	17.	1. 47	.03	96.	. 50	1.40	1.96	.08	. 22
\$0-\$494 \$495-\$994 \$995 or more	22 43 114	3.19 3.84 3.48	3.91 4.13 4.96	. 52	.56	1.05	20.50	1.21	. 54	1.05 1.37 1.47	1.76 1.78 2.07	0 .06 .10	. 13
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	65 25 24 24	3.46 3.48 3.54	4.84 4.95 5.36	. 72	.72 .82 .87	1.34 1.74 2.45	.01	.77	. 51	1. 22 1. 46 2. 12	1. 92 2. 26 2. 30	8.58	. 29
Nonfarm families	32	3, 55	1.78	.10	. 33	- Se	(01)	. 40	. 24	.85	96.	0	.12

² Represents household size in 21-meal-equivalent persons. Twenty-one meals Averages are based on the total number of families in each class (col. 2).

Sumed from family food supply considered equal to the consumption of a set, age, or physical activity and fewness of meals consumed by individuals. To compete horsehold size in persons, total meals were divided by 21.

Approximately the quantity of fluid milk plus the fluid milk equivalent of eream, ice cream, evaporated milk, and eleese. To get the total consumption of milk in its various of milk and eleese. To get the total consumption of milk in his various of cool milk in the various of milk in t terms of their

n its vario fluid who produets	Factors for converting pounds of dairy prod-	ucts to quarts of milk	0.94	 	. 1.40 3.20
tion of milk i quantity of ressing dairy	2 6 E	Б			
ocal consump iverted to the used for exp					
duet was con The factors lown below:					
u, vaporaced mins, and enesse. To get the fortal consumption of milk in its vario, the amount of each dairy product was converted to the quantity of fluid who swhich that product represents. The factors used for expressing dairy products is of their milk equivalents are shown below:			1 1 1	Dry whole milk cream Ite eream	Cheese:
poraced milk amount of eg that produceir milk equi		Dairy produet:	Evaporated milk Condensed milk Dry skim milk	Ory whole mi Sream	Cheese: Cottage
in, eva is, the whiel		Dair	H OH	HOH	

Insofar as possible, the milk-equivalent factor was developed on the basis of the nutritive value of the product compared with fluid whole milk. The factors shown above apply only in equating the various dairy products to fluid whole milk on the basis of protein and unineals.

Includes weight of dry beans and peas and nuts added to 40 percent of the weight of 4 Includes bacon and salt pork.

canned and cooked dry beans, and 67 percent of weight of peanuts and 40 percent of weight 6 Includes fresh and canned fruits and vegetables plus the fresh fruit equivalent of dried fruits, 21/4 times the weight of prunes, 4 times the weight of raisins, and 61/2 times the weight of other nuts in shell.

thirds the weight of commercially baked goods and to one-fifth the weight of canned cooked 'Includes the weight of flour, meal, eereals, pastes, and prepared mixes added to twomixtures and hominy. of other dried fruits.

8 Includes the weight of sugar, sirup, eandy, and prepared desserts added to one-eighth 9 Includes some families with negative incomes and with income or farm tenure unknown, not shown separately. the weight of soft drinks.

10 0.005 pound or less

Table 16.—Money value of food from all sources and from home production, in terms of 11 food groups and accessories, averages for open-country families in a Georgia county and an Ohio county, early summer 1945

		House-				¥	verage mo	ney valu	Average money value of food per person per week $^{\mathrm{1}}$	er person	per week	1			
Location, occupation, net cash family income for year, race, and farm tenure	Families	hold size in equiva- lent persons 2	Pood	Milk	Fats, oils	Eggs	Meat, poultry, fish	Dry beans and peas, nuts	Potatoes, sweet- potatoes	Toma- toes, citrus fruit	Green and yellow vegeta- bles	Other vegeta- bles and fruits	Grain products	Sugars, other sweets	Acces- sories 3
COUNTY IN GEORGIA								Fro	From all sources	sea					
	Number 4 282	Number 4.67	Dollars 3.14	Dollars 0.34	Dollars 0.30	Dollars 0.15	Dollars 0.74	Dollars 0.01	Dollars 0.04	Dollars 0.12	Dollars 0.51	Dollars 0.36	Dollars 0.36	Dollars 0.14	Dollars 0.06
Farm families	4 249	4.79	3.18	.35	.30	.15	.75	.01	.04	.12	. 52	.38	.35	.14	90.
\$0-\$494 \$495-\$994 \$995 or more	94 97 48	4.24 5.17 5.13	2.95 3.08 3.72	.34	82.22	.14	.65 .70 .99	 	.03	.13	.53	.36	.34	41. 14. 16.	.05 .06 .07
White families	119	4.65	3.83	. 48	.33	.19	. 95	.00	.05	.16	. 58	. 42	.39	.16	.10
Owners, rentersShare croppers, laborers.	75	4.68	4.16	.58	38.	.20	1.07	.01	.04	.16	. 59	74.	.41	.15	.10 01.
Negro families	130	4.91	2.59	. 24	.27	п.	.57	.01	.03	60.	.46	.34	.32	.12	.03
Owners, renters	51 79	5.22	2.39	.34	.28	.13	. 57	(6)	.03	.11.	. 53	.38	8.8.	.13	.03
Nonfarm families	32	3,83	2.74	.21	.33	.16	99.	.02	.05	.10	. 42	.24	.34	.14	90.
White	16	3.85	3,43	E::	98.8	.09	.85	.02	.06	.03	.36	.35	.35	.15	.03 .03

OHO NI AINHOO		_	_	_	_	_	_	_		_	-	-	-			
Il families.	4 237	3.53	4.03	67.	. 32	.25	02.	.07	.14	.19	.25	. 52	.46	.20	.12	
Farm families	4 201	3.54	4.12	.81	.33	.25	. 74	.07	.14	.20	.27	.53	. 45	. 20	Ε.	
\$0-\$494 \$495-\$994 \$995 or more	22 43 114	3.19 3.84 3.48	3.38	.682	8.8.8.	2.24	.47 .62 .79	99.99	41	.17	25.25	. 45	.44 .41 .46	.18	110	
\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	65 25 24	3.48 3.48 3.54	4.04	8.8.8.	38.4.	.28 .30	.83	.06	.13	.19	31.	. 55	.45	. 22	===	
Nonfarm families	32	3, 55	3.23	.63	. 24	.20	.37	.11	.12	.17	61.	. 44	. 44	.18	.12	
COUNTY IN GEORGIA								From hor	From home production	tion 6						
ll families	4 282	4.67	2.00	0.29	0.15	0.12	0.44	(9)	0.03	0.12	0.45	0.30	0.04	0.02		
Farm families	4 249	4.79	2.11	.30	.16	.13	. 47	(9)	.03	.13	.47	.32	.05	.05		
\$0-\$494 \$195-\$994 \$995 or more	94 97 48	4.24 5.17 5.13	1.83 2.05 2.57	. 28 . 28 . 46	.16	13	.39	eee	.03	11.	. 46	E.E. 45.	.05	.06	\$ 8 1 1 9 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
White families	119	4.65	2.68	. 43	. 20	.16	99.	(9)	.04	.18	.53	.35	90.	.07		
Owners, rentersShare croppers, laborers.	75	4.68	3.17	. 55	.25	.19	8.4.	වෙ	.05	.22	.56	.41	.05	.07		
Negro families	130	4.91	1.59	. 19	.12	01.	. 29	(9)	.03	80.	. 41	. 29	.04	.04	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	,
Owners, rentersShare eroppers, laborers.	51 79	5.22	2.05	.30	.16	.13	.36	<u></u> 00	.04	.10	.51	.36	.04	.05		
Nonfarm families	32	3.83	.87	80.	.04	80.	.19	0	.02	90.	. 24	. 12	(9)	.02	1	
White	16	3.85	1.18	1.00	90.	1.0.	.28	00	.03	.10	.23	90.	<u>ම</u>	.04	1 1	
				-	-	-	1									

See footnotes at end of table.

Table 16.—Money value of food from all sources and from home production, in terms of 11 food groups and accessories, averages for open-country families in a Georgia country and an Ohio country, early summer 1945—Continued

		House-				A	verage m	oney valu	Average money value of food per person per week 1	er person	per week	1			
Location, occupation, net cash family income for year, race, and farm tenure	Families	hold size in equiva- lent persons 2	All	Milk	Fats, oils	Eggs	Meat, poultry, fish	Dry beans and peas, nuts	Potatoes, sweet- potatoes	Toma- toes, citrus fruit	Green and yellow vegeta- bles	Other vegeta- bles and l	Grain products	Sugars, other sweets	Acces- sories ³
COUNTY IN OHIO								From hor	From home production ⁵	tion 6					
All families	Number 4 237	Number 3. 53	Dollars 2.17	Dollars 0.63	Dollars 0.18	Dollars 0.23	Dollars 0.50	Dollars (6)	Dollars 0.05	Dollars 0.05	Dollars 0.18	Dollars 0 31	Dollars (⁶)	Dollars 0.04	Dollars
Farm families	1 201	3.54	2.36	.67	.20	.24	. 56	©	90.	90.	61.	. 33	(9)	.05	
\$0-\$494 \$495-\$994 \$995 or more	22 43 114	3.19 3.84 3.48	1.75 2.01 2.55	.55	220.23	. 19	.32 .41 .63	(e) (e) (e) (f)	.04 .07	.05 .05	20.5	.29	0 (6) 0.01	0.03 0.06	
\$995~\$1,994. \$1,995~\$2,994. \$2,995 or more	65 25 24	3.46 3.48 3.54	2.30	. 69 . 89 . 68	. 19	.28	.53 .68 .85	<u>ම</u> ෙ	.0.4 .0.4	.06 .05 .07	.15	8.4.4	(e) 10: 10:	0.05	
Nonfarm families	32	3.55	26.	. 33	.04	п.	01.	ව	.03	.03	. 12	.18	0	.03	

¹Averages were based on the total number of families in each class (col. 2).

²Represents household size in 21-met-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person, regardless of sex, age, or physical activity, and fewness of meals consumed by individuals. To compute household size in persons, total meals were divided by 21.

³ Includes coffee, fea, peavening agents, salt, vinegar, extracts, spices, cc.

4 Includes some families with negative incomes and with income or farm tenure unknown, not shown separately. § Valued at the average retail prices paid for the same foods by other families of similar incomes in the county.

• Less than 0.005 dollar.

See footnotes at end of table.

Table 17.—Percent of families consuming food from all sources and from kome production, in terms of 11 food groups, open-country families in a Georgia county and an Obio county, early summer 1945

Pamilies consuming food	From home production	Meut, beans toes, foes, and vege-broak fish muts, toes fruit trables fruit form fruit fruit forms.		82 76 2 45 60 92 84 43 54	72 67 1 34 53 90 80 40 46 87 73 1 47 63 92 84 44 56 90 94 2 65 65 94 90 46 67	88 88 2 56 76 93 91 46 69	93 95 3 64 89 97 97 51 72 80 77 0 43 52 86 80 39 64	76 65 2 35 46 91 78 39 41	67 51 1 30 38 87 73 42 30	47 40 0 28 28 60 59 3 22	56 50 0 38 44 50 62 6 38 38 31 0 19 12 69 56 6
		Green and yellow vege- tables	Percent 89	92	8 8 8 8	83	97	16	878	09	69
	Inetion	Toma- toes, citrus fruit	Percent 56	99	888	26	89	46	38	82	12
	ome proc	Pota- toes, sweet- pota- toes	Percent 43	45	34 47 65	99	2.6	35	8 8	28	38
ng food	From h	Dry beans and peas, nuts	Percent 1	23	8	2	e 0	23	1 2	0	0
consum		Meat, poul- try, fish	Percent 72	92	67 73 94	88	95	65	86	40	31
Families		Eggs	Percent 78	82	72 87 90	88	8, 83	92	96	47	38 29
		Fats, oils	Percent 61	65	54 66 79	9/	87	55	174	28	31 25
		Milk	Percent Percent	26	45	20	45	43	38	16	25 6
		Toma- toes, citrus fruit	Percent 74	92	70 78 85	68	96	64	69	99	31
	From all sources 2	Pota- toes, sweet- pota- toes	Percent Percent	22	47 66 71	71	75	45	48	54	38
	rom all	Dry beans and peas, nuts	Percent 21	21	16 25 25	20	88	12	2 S	22	25
		Milk	Percent 84	92	88 58	16	80	81	88 92	7.0	62 88
	House- hold	size in equiva- lent persons	Number 4.67	4.79	4. 24 5. 17 5. 13	4, 65	4.68	4.91	5. 22	3.83	3, 85
		Families	Number 3 282	3 249	94 97 48	119	75	130	51	32	91
			COUNTY IN GEORGIA	Farm families	\$0-\$494 \$495-\$904 \$995 or more	White families	Owners, renters Share croppers, laborers	Negro families.	Owners, rentors Share croppers, laborers	Nonfarm families	White

Table 17.—Percent of families consuming food from all sources and from home production, in terms of 11 food groups, open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

		Sugars, other sweets	Percent 47	48	50 53 53	54 56 46	41
		Grain prod- duets	Percent 8	6	12 0	. 8	0
		Other vege- tables and fruits	Percent 92	96	100 93 96	97 96 92	72
		Green and yellow vege- tables	Percent 88	91	88 88 88 88	91 100	69
	duction	Toma- toes, citrus fruit	Percen 46	48	50 47 47	51 36 50	41
	From home production	Pota- toes, sweet- pota- toes	Percent Percent	34	23 33	32 32 20	78
ing food	From b	Dry beans and peas, nuts	Percent 6	9	12 13 3	880	e0
Families consuming food		Meat, poul- try, fish	Percent 68	92	. 64 72 79	77 80 83	19
Familie		Eggs	Percent 59	95	95 96	92 100 100	20
		Fats, oils	Percent 76	84	68 84 88	88 88	19
		Milk	Percent 79	88	82 84 89	86 96 92	25
		Tomatoes, citrus fruit	Percent 85	85	88 8 43	85 92 92	88
	From all sources ²	Pota- toes, sweet- pota- toes	Percen 93	94	91 86 97	95 100 100	84
	From all	Dry beans and peas, nuts	Percent 79	78	77 86 76	80 76 67	84
		Milk	Percent 100	100	901 901 901	001100	100
	House-	cquiva- lent persons 1	Number 3. 53	3.54	3.19 3.84 3.48	3, 46 3, 48 3, 54	3, 55
		Families	Number 3 237	3 201	22 43 114	25 24 24	32
	net						
	Location, occupation,	eash family income for year, race, and farm tenure	COUNTY IN OHIO All families	Farm families	\$0-\$494 \$495-\$994 \$995 or more	\$995-\$1,994 \$1,995-\$2,994 \$2,995 or more	Nonfarm families

² Percents are omitted for 7 food groups for which nearly all families reported some use. ³ Includes some families with negative incomes and with income or farm tenure unknown, not shown separately. ¹ Represents household size in 21-meal-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person, regardless of sex, age, or physicial activity and fewness of meals consumed by individuals. To compute the household size in persons, total meals were divided by 21.

Table 18.—Consumption of selected items of food, per person per week, averages for farm families in a Georgia county and an Ohio county, early summer 1945

		Georgia	county		
Food	White	families	Negro	families	Ohio
	Owners, renters	Share croppers, laborers	Owners, renters	Share croppers, laborers	county
Milk and milk products: Fluid milk (whole milk, buttermilk, skim milk) Evaporated milk Cream, heavy and light	Pounds 8. 19 . 05 . 63	Pounds 4.39 .12 .15	Pounds 5.01 .03 .28	Pounds 2. 52 . 05 . 03	Pounds 10. 26 . 15 . 32
Cottage cheeseAmerican cheese	0 .04	0 .05	0 . 05	0 .01	. 15
Butter. Margarine. Lard Other shortening Bacon. Salt pork	. 13 . 01 . 40 . 08 . 15 . 32	. 08 . 02 . 40 . 09 . 04 . 50	. 08 . 01 . 24 . 14 . 06 . 41	.04 .03 .23 .12 .06 .49	. 29 . 13 . 33 . 02 . 26 . 02
Eggs, meat, poultry, fish: Eggs. Beef. Pork (excludes bacon, salt pork) Lunch meats, frankfurters. Chicken, other poultry. Fish, shellfish (fresh).	. 86 . 17 . 94 . 08 . 90 . 36	. 64 . 23 . 46 . 08 . 64 . 45	. 52 . 22 . 48 . 05 . 36 . 33	.33 .14 .46 .07 .39	1.11 .49 .77 .15 .40
Dry beans and peas, nuts: Dry beans and peas Peanut butter	(1) . 03	. 05	0.01	.01	. 40 . 07
Fresh and frozen vegetables: Cabbage. Collards. Mustard greens. Lima beans (unshelled weight).	. 18 . 02 0	. 27	. 48 . 27 0	. 37	. 48 0 . 14
Snap beans. Okra. Garden peas (unshelled weight). Field peas (unshelled weight). Carrots.	2. 81 . 06 . 19 (1) 4. 17 . 01	2. 07 . 07 . 21 . 21 4. 44 0	1. 28 . 14 . 34 . 09 3. 72	. 94 . 08 . 16 . 02 3. 66 0	(1) . 16 0 . 47 0 . 08
Potatoes Sweetpotatoes Tomatoes Corn (in-husk weight) Green onions Summer squash	. 90 . 04 1. 67 2. 75 . 08 . 18	. 66 . 04 1. 06 2. 38 . 07 . 19	. 43 . 10 . 72 1. 53 . 07 . 06	. 40 . 05 . 54 1. 70 . 07 . 14	2. 14 . 11 . 18 . 04 . 30
Canned vegetables: Snap beans Garden peas. Tomatoes (pulp and juice)	. 07 . 02 . 02 . 02	.11 .03 .09 .06	0 (¹) 0 . 01	0 0 . 02 . 02	.35 .09 .46 .19
Fresh fruits: Oranges Grapefruit. Apples Bananas Berries	. 04 0 . 06 . 03	0 0 .01 .08 .01	0 . 02 . 04 (1)	. 02 0 (1) 0 . 01	. 52 . 25 . 35 . 15 . 21
Peaches	. 66 4. 00 . 03	. 14 4. 30 . 02	. 20 10. 73 0	. 07 6. 34	. 17 . 41
Berries	. 01	.01	. 03	0.04	.12
White bread, enriched Crackers Cake Cookies White flour	. 33 . 06 . 11 . 05 2. 33	. 27 . 09 . 06 . 02 2. 50	. 06 . 03 . 02 (1) 3. 07	.11 .03 .03 .02 2.65	1. 52 . 18 . 15 . 17 . 97
White corn meal—not degermed White refined corn meal Hominy grits Rice, white Rolled oats, oatmeal	2. 53 1. 00 . 60 . 21 . 13 . 02	2.50 .78 .77 .18 .11	.91 .79 .11 .12	. 81 . 66 . 10 . 15	. 94 . 01 . 23 (1)
Ready-to-eat cereal	. 64	. 04	(1)	(1)	. 26
Corn sirup. Cane sirup Jellies, jams, preserves. Soft drinks	(1) . 49 . 22 . 05	.01 .73 .13 .03	. 78 . 08 . 01	. 29 0 . 81 . 02 . 02	.38 .01 .27 .33

^{1 0.005} pound or less.

Table 19.—Contribution of food in 11 groups to nutritive value of diets, average percentages for open-country families in a Georgia county and an Ohio county, early summer 1945

Percent of each nutrient contributed by specified food groups												
Nutrient, location, occupation, race, and farm tenure	All	Milk	Fats,	Eggs	Meat, poul- try, fish	Dry beans and peas, nuts	Pota- toes, sweet- pota- toes	Toma- toes, citrus fruit	Green and yel- low vege- tables	Other vege- tables and fruits	Grain prod- ucts	Sugars, other sweets
COUNTY IN GEORGIA						Foo	d energ	У				
Farm families	100	9	20	2	7	(1)	1	(1)	6	5	41	9
White families: Owners, renters Share croppers, laborers	100	13	18	2 2	9	(1)	1	1	6	5	36 37	9
Negro families: Owners, renters	100	9	18	2	6	(1)	1	(1)	6	7	42	9
laborers	100	5	21	1	7	1	1	(1)	6	5	43	10
Nonfarm families	100	6	25	2	7	1	1	(1)	6	3	40	9
Farm families Nonfarm families	100 100	18 17	17 17	3	10 6	4 6	3	1 1	1	4	29 31	10 11
COUNTY IN GEORGIA						I	rotein				-	
Farm families	100	15	2	5	18	1	1	1	15	5	37	(1)
White families: Owners, renters	100	21	2	6	20	1	1	1	14	4	30	(1)
laborers	100	14	2	6	18	2	1	1	17	4	35	(1)
Negro families: Owners, renters Share croppers, laborers	100	17 10	2 2	5	15 19	(1)	1	1	14	5	40 42	(1)
Nonfarm families	100	11	2	7	20	2	1	1	14	3	39	(1)
COUNTY IN OHIO												
Farm families	100 100	29 27	2 2	9	18 12	7 11	3 2	1 1	3 2	2 2	26 31	(1)
COUNTY IN GEORGIA						* C	alcium					
Farm families	100	43	(1)	-1	1	(1)	(1)	(1)	10	3	40	2
White families: Owners, renters	100	56	(1)	2	1	(1)	(1)	1	9	2	28	1
Share croppers, laborers	100	41	(1)	2	1	1	(1)	1	11	2	39	2
Negro families: Owners, renters Share croppers, laborers	100	42 29	(1)	1	1	(1) (1)	(1)	(1)	11	3	40 52	2 3
Nonfarm families	100	35	(1)	3	1	1	1	1	13	2	41	2
COUNTY IN OHIO			,,									
Farm families Nonfarm families	100 100	74 70	(1) (1)	3 3	1 1	3 4	1 1	1 1	5 4	2 3	8 11	2 2

See footnote at end of table.

Table 19.—Contribution of food in 11 groups to nutritive value of diets, average percentages for open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

		Per	cent c	of each	nutri	ent con	tribute	d by sp	ecified	food gr	oups	
Nutrient, location, occupation, race, and farm tenure	All	Milk	Fats,	Eggs	Meat, poul- try, fish	Dry beans and peas, nuts	Pota- toes, sweet- pota- toes	Tomatoes, citrus fruit	Green and yel- low vege- tables	Other vege- tables and fruits		Sugars other sweets
COUNTY IN GEORGIA							Iron					
Farm families	100	1	1	5	10	(1)	1	2	20	6	43	11
White families: Owners, renters Share croppers,	100	2	1	7	12	(1)	2	3	21	6	39	
laborers	100	1	1	5	9	2	1	2	22	4	42	11
Negro families: Owners, renters Share croppers,	100	1	1	4	9	(1) (1)	1	1	18 18	7	46 47	15
laborers Nonfarm families	100	1	2	6	12	2	2	2	17	4	43	1.
COUNTY IN OHIO	100					_		Ĩ.		1	10	
Farm families	100 100	3 3	1 1	9	13 9	14 18	5 4	2 2	8 7	6	31 33	8
						Vitam	in A va	lue				
COUNTY IN GEORGIA									-			
Farm families	100	14	4	8	3	(1)	5	14	18	34	0	(1)
White families: Owners, renters Share croppers,	100	20	5	10	(1)	(1)	3	19	15	28	(1)	(1)
laborers	100	15	5	11	(1)	(1)	4	19	17	29	(1)	(1)
Negro families: Owners, renters Share croppers, laborers	100 100	11 9	3	6	6	0	8	8	19 20	39 40	0	(1) (1)
Nonfarm families	100	10	9	10	15	(1)	4	11	20	21	0	(1)
COUNTY IN OHIO	200	20		10	-	()	-		20	21		()
Farm families Nonfarm families	100 100	23 21	12 9	11 10	2 6	(1) 1	7 6	8 7	28 26	9 14	(1) (1)	(1) (1)
						Asco	rbic aci	d				
€OUNTY IN GEORGIA												
Farm families	100	4	0	0	1	(1)	6	14	50	25	0	(1)
White families: Owners, renters Share croppers,	100	6	0	0	(1)	(1)	7	20	43	23	0	1
laborers	100	4	0	0	(1)	(1)	7	17	51	21	0	(1)
Negro families: Owners, renters Share croppers,	100	4	0	0	1	0	5	10	52	28	0	(1)
laborersNonfarm families	100	3	0	0	1 2	(1)	5 8	10 12	53 58	28 17	0	(1) (1)
COUNTY IN OHIO	100	J	U	U	2	()	8	12	00	11	U	(*)
Farm families Nonfarm families	100 100	8	0	0	(¹) ₁	1	19	26 27	29 25	16 18	0	1

See footnote at end of table.

Table 19.—Contribution of food in 11 groups to nutritive value of diets, average percentages for open-country families in a Georgia county and an Ohio county, early summer 1945—Continued

	1	Percent of each nutrient contributed by specified food groups											
Nutrient, location, occupation, race, and farm tenure	All	Milk	Fats,	Eggs	Meat, poul- try, fish	Dry beans and peas, nuts	Pota- toes, sweet- pota- toes	Toma- toes, citrus fruit	Green and yel- low vege- tables	vege- tables and	Grain	Sugars, other sweets	
						Th	iamine				•	-	
COUNTY IN GEORGIA													
Farm families	100	5	3	1	14	(1)	1	1	19	9	47	(1)	
White families: Owners, renters Share croppers,	100	7	3	2	18	(1)	2	2	19	7	40	(1)	
laborers	100	5	3	2	11	1	2	2	22	8	44	(1)	
Negro families: Owners, renters Share croppers,	100	5	2	1	10	(1)	1	1	18	11	51	(1)	
laborers Nonfarm families	100	3	3	2	13 15	(1)	1 2	1	18	9	51	(1)	
COUNTY IN OHIO	100	3	3	2	15	1	2	1	18	5	50	(1)	
Farm families Nonfarm families	100 100	13 12	4 3	4 4	20 12	8 12	7 6	3 3	6 5	3 4	32 39	(1) (1)	
						Ri	boflavir	1					
COUNTY IN GEORGIA			1										
Farm families	100	30	1	5	8	(1)	1	1	13	10	31	(1)	
White families: Owners, renters Share croppers,	100	40	1	6	8	(1)	1	2	11	8	23	(1)	
laborers	100	28	1	6	7	1	1	1	15	9	30	1	
Negro families: Owners, renters Share croppers,	100	29	1	5	7	(1)	1	1	12	12	32	(1)	
laborers	100	21	1	4	9	(1)	1	1	14	12	37	(1)	
Nonfarm families COUNTY IN OHIO	100	22	1	8	13	1	1	1	13	6	33	1	
72 6 71/	100	52	,	9	8	3	2	,			16	,	
Nonfarm families	100 100	49	1	9	8	4	2	1	4	3	16 18	1	
						1	Niacin						
COUNTY IN GEORGIA													
Farm families	100	2	2	(1)	24	2	2	2	13	9	44	(1)	
White families: Owners, renters Share croppers,	100	3	2	(1)	29	2	3	3	. 13	9	35	1	
laborers	100	2	2	(1)	24	3	2	2	15	8	41	1	
Negro families: Owners, renters Share croppers,	100	2	2	(1)	20	1	2	1	13	9	50	(1)	
laborers Nonfarm families	100	1	2 2	(1)	22 26	3	3	1 2	13 12	8	49	(1)	
COUNTY IN OHIO	100	1	2	(-)	20	0	J		12	1	10	1	
Farm familiesNonfarm families	100 100	5 4	2 2	(1) (1)	29 21	8 15	8	3 2	4 3	5 5	35 38	$\frac{1}{2}$	

^{1 0.5} percent or less.

Table 20.—Level of consumption of milk, and calcium, riboflavin, vitamin A, protein, and food energy value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

		Diets f	urnishii	ng speci	fied qua		of dietar day	y essent	ials per	nutritie	on unit
Location and average quantity, in quarts, of milk equivalent ¹ consumed per per-	Fami- lies	Calc (m	eium g.)		flavin g.)		nin A (I. U.)	Pro (gr	tein n.)		energy
son per week		536 or more	535 or less	1.34 or more	1.33 or less	3,350 or more	3,340 or less	47 or more	46 or less	2,010 or more	2,000 or less
COUNTY IN GEORGIA	Num- ber 36	Per- cent 39	Per- cent	Per- cent 67	Per- cent 33	Per- cent 33	Per- cent 67	Per- cent 78	Per- cent 22	Per- cent 78	Per- cent 22
0.01-1.74 1.75-3.49 3.50-5.24 5.25-6.99	77 54 30 26	62 94 97 100	38 6 3	74 100 100 100	26 0 0	52 56 80 96	48 44 20 4	84 100 97 100	16 0 3 0	84 93 97 100	16 7 3 0
7.00 or more COUNTY IN OHIO	26	100	ő	100	ő	96	4	100	0	100	ő
0.01-1.74 1.75-3.49 3.50-5.24 5.25-6.99	13 39 44 45 60	31 85 100 100 100	69 15 0 0	69 100 100 100 100	31 0 0 0	85 90 95 91 98	15 10 5 9	85 100 100 100 100	15 0 0 0	77 95 100 98 100	23 5 0 2

¹ Approximately the quantity of fluid milk plus the fluid-milk equivalent of cream, ice cream, evaporated milk, and cheese. Minerals and protein are taken into account in measuring equivalence. See table 15, footnote 3, for the factors used to convert pounds of dairy products to quarts of fluid milk.

Table 21.—Level of consumption of meat, poultry, and fish, and protein, riboflavin, niacin, iron, food energy, and thiamine value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

-														
т	ocation and aver-		Diets	furnis	shing s	pecifie	d quan		of dieta day	ary ess	entials	per nu	itrition	unit
1.	age quantity, in pounds, of meat, poultry, and fish ¹	Fami- lies		tein n.)	Riboflavin (mg.)		Niacin (mg.)		Iron (mg.)		Food energy (cal.)		Thiamine (mg.)	
	consumed per person per week		47 or more	46 or less	1.34 or more	1.33 or less	10.0 or more	9.9 or less	8.0 or more	7.9 or less	2,010 or more	2,000 or less	1.00 or more	0.99 or less
-	COUNTY IN GEORGIA	Num-	Per-	Per-	Per-	Per-	Per-	Per-	Per-	Per-	Per-	Per-	Per-	Per-
	Vone	ber 15 51	cent 93 76	cent 7 24	cent 87	cent 13 24	cent 100 98	cent 0 2	cent 93 96	cent 7	cent 93 76	cent 7	cent 100 100	cent
1.	00-1.99 00-2.99 00 or more	71 59 53	89 100 100	11 0 0	83 97 92	17 3 8	99 100 100	1 0 0	99 100 100	1 0 0	86 98 98	14 2 2	100 100 100	0 0
0.	COUNTY IN OHIO	99	100	0	92		100	0	100		98	2	100	0
0.	one 01-0.99 00-1.99	14 34 57	100 97 98	0 3 2	100 94 98	0 6 2	86 88 98	14 12 2	93 97 98	7 3 2	86 91 98	14 9 2	93 94 98	7 6 2
2.	00-2.99 00 or more	41 56	100 100	0 0	98 100	2 0	100 100	0 0	100 100	0 0	100 100	0 0	100 100	0 0

¹ Excludes bacon and salt pork.

Table 22.—Level of consumption of green and yellow vegetables, and ascorbic acid, vitamin A, and iron value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

		D	iets furn utrients	ishing spe per nutr	ecified qu ition uni	antities t per day	of
Location and average quantity, in pounds, of green and yellow vegetables consumed per person per week	Fami- lies	Ascorb (millig	oic acid grams)	(Intern	A value ational its)	Iro (millig	
		50 or more	49 or less	3,350 or more	3,340 or less	8.0 or more	7.9 or less
COUNTY IN GEORGIA 0.00-0.99	Number 21 52 46 48 28 20 34	Percent 29 67 91 100 100 100 100	Percent 71 33 9 0 0 0 0 0	Percent 33 32 52 71 54 80 85	Percent 67 68 48 29 46 20 15	Percent 86 98 100 100 100 100 100	Percent 14 2 0 0 0 0 0 0 0 0
0.00-0.99 1.00-1.99 2.00-2.99 3.00 or more	43 59 47 52	70 92 98 100	30 8 2 0	81 93 98 100	19 7 2 0	93 100 100 100	7 0 0 0

Table 23.—Level of consumption of tomatoes and citrus fruit, and ascorbic acid value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

Location and average quantity, in pounds, of tomatoes and citrus fruit consumed per person per week	Families (number)	milligram	hing specified s of ascorbic nutrition unit ercent)
		50 or more	49 or less
		Tomatoes an	d citrus fruit
COUNTY IN GEORGIA None	60 66 67 56	73 73 97 100	27 27 3 0
		Citrus	fruit
None	210 34 5	85 88 100	15 12 0
		Tomatoes an	d citrus fruit
COUNTY IN OHIO None	30 55 42 31 43	70 82 100 97 100	30 18 0 3 0
	- 1	Citrus	fruit
None	78 46 77	81 89 100	19 11 0

Table 24.—Level of consumption of grain products, and food energy, protein, calcium, iron, thiamine, riboflavin, and niacin value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

		Diets furnishing specified quantities of dietary essentials per nutrition unit per day													
Location and average quantity, in pounds, of grain products 1 consumed per person	Fam- ilies	ene	ood ergy al.)	Pro (gr	tein		eium g.)	Ir (m		Thia (m	mine g.)	Ri flar (m	vin	Nia (m	
per week		2,010 or more	2,000 or less	47 or more	46 or less	536 or more	535 or less	8.0 or more	7.9 or less	1.00 or more	0.99 or less	1.34 or more	1.33 or less	10.0 or more	9.9 or less
COUNTY IN GEORGIA 1.00-2.99 3.00-3.99 4.00-4.99 5.00-5.99 6.00 or more COUNTY IN OHIO	No. 25 40 69 39 76	Pct. 48 75 97 100 100	Pct. 52 25 3 0 0	Pct. 60 82 94 100 100	Pct. 40 18 6 0 0	Pct. 36 45 81 92 99	Pct. 64 55 19 8 1	Pct. 96 92 100 100 100	Pct. 4 8 0 0 0	Pct. 100 100 100 100 100	Pct. 0 0 0 0 0 0	Pct. 60 62 91 97 100	Pct. 40 38 9 3 0	Pct. 96 98 100 100 100	Pct. 4 2 0 0 0 0
1.00-1.99 2.00-2.99 3.00-3.99 4.00-4.99 5.00 or more	27 62 53 33 26	89 95 100 100 100	11 5 0 0	96 98 100 100 100	4 2 0 0 0	78 90 96 97 100	22 10 4 3 0	89 100 100 100 100	11 0 0 0 0	93 97 100 100 100	7 3 0 0	93 97 100 100 100	7 3 0 0 0	89 97 98 100 96	11 3 2 0 4

¹ Includes the weight of flour, meal, cereals, pastes, and prepared mixes added to two-thirds the weight of commercially baked goods and to one-fifth the weight of canned or cooked mixtures and canned cooked hominy.

Table 25.—Level of consumption of other vegetables and fruits, and vitamin A and ascorbic acid value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

Location and average quantity, in pounds, of other vegetables and fruits ¹ consumed per person per week	Families	nutrien Vitamin	nishing sp ts per nutr A value onal Units)	ecified qua rition unit Ascorb (millig	per day ic acid
		3,350 or more	3,340 or less	50 or more	49 or less
COUNTY IN GEORGIA None 0.01-2.99 3.00-5.99 6.00-8.99 9.00 or more	Number 19 99 52 15 64	Percent 32 37 79 60 98	Percent 68 63 21 40 2	Percent 68 76 90 93 100	Percent 32 24 10 7 0
COUNTY IN OHIO 0.00-2.99	² 87 77 37	86 99 100	14 1 0	80 96 100	20 4 0

¹ Includes weight of fresh and canned products added to 2½ times the weight of prunes, 4 times the weight of raisins, and 6½ times the weight of other dried fruits.
² None, 2 families.

Table 26.—Over-all quality of diets and money value of home-produced food and frequency with which families had livestock and gardens for family use, averages for farm families in a Georgia county and an Ohio county, early summer 1945

		Aver-		F	amilies	having	_	
		age money	Livesto	ck for fa	mily us	se, sumr	ner 1945	
Location, percent of NRC allowance for least satisfactory essential in diet, race, farm tenure, net cash income per person	Fami- lies	value of home-			Pou	ltry		Gar-
per year, and time in dwelling	TICS	pro- duced food for year 1	Brood sows	Milk cows	Lay- ing hens	Other	Other ani- mals	dens in 1944
COUNTY IN GEORGIA	37							
All families: 67 percent or more	Num-	Dol-	Per-	Per-	Per-	Per-	Per-	Per-
	ber	lars	cent	cent	cent	cent	cent	cent
	129	433	74	80	95	90	52	90
	120	271	53	46	88	81	35	88
White families: 67 percent or more 66 percent or less Negro families:	83	432	73	86	96	90	48	94
	36	329	50	47	92	94	39	89
67 percent or more	46	437	74	70	93	89	59	83
	84	247	40	38	51	49	32	45
Owners and renters: 67 percent or more 66 percent or less	86	513	83	95	99	93	58	98
	40	406	78	72	100	90	42	98
Share croppers and laborers: 67 percent or more66 percent or less	43	275	56	49	88	84	40	74
	80	204	41	32	82	76	31	84
\$0-\$94: 67 percent or more66 percent or less \$95-\$194:	27 45	473 243	78 56	74 47	100 82	93 71	63 29	93 82
67 percent or more	46	451	76	80	93	89	56	87
66 percent or less	48	277	52	42	94	87	44	92
\$195 or more:	50	412	70	82	94	88	50	92
67 percent or more66 percent or less	23	334	52	57	91	91	22	96
2 years or less: 67 percent or more-66 percent or less 3 years or more:	52	400	67	67	92	88	50	83
	67	230	45	36	87	76	34	85
67 percent or more	77	456	78	88	97	91	53	95
66 percent or less	53	323	64	58	91	87	36	92
COUNTY IN OHIO						-		
All families: 67 percent or more 66 percent or less	160	363	61	89	93	55	7	96
	41	313	51	73	90	61	17	93
\$0-\$94: 67 percent or more 66 percent or less \$95-\$194:	7 3	307 361	71 67	100 67	100 100	43 0	0	100 100
67 percent or more 66 percent or less \$195-\$294:	16 15	320 328	50 47	81 67	88 93	62 60	0 20	100 87
66 percent or more	16	331	50	75	94	38	0	94
	6	304	50	67	83	67	17	100
\$295 or more: 67 percent or more 66 percent or less	105 12	373 298	62 58	91 75	93 92	60 67	10 17	95 100
2 years or less: 67 percent or more 66 percent or less	40 10	342 343	44 50	68 70	70 80	44 60	2 20	74 90
3 years or more: 67 percent or more	120	369	47	90	94	55	8	97
	31	303	52	74	94	61	16	94

¹ At farm values.

Table 27.—Size of garden and level of vitamin A and ascorbic acid value of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

		,				
					ecified qua	
	Location, operation, and size of garden in 1944	Families		A value onal Units)		pic acid grams)
			3,350 or more	3,340 or less	50 or more	49 or less
Al	COUNTY IN GEORGIA	Number 1 249	Percent 63	Percent 37	Percent 86	Percent 14
	Without garden	25 222	52 64	48 36	80 86	29 14
	Including any potato and sweet-corn patch	41	54	46	83	17
	Less than ¼ acre ¼ acre to less than ½ acre ½ acre to less than ¾ acre ¾ acre or more	6 10 12 13	17 40 58 77	83 60 42 23	67 80 75 100	33 20 25 0
	Not including potato and sweet-corn patch_	181	66	34	87	13
	Less than ¼ acre. ¼ acre to less than ½ acre. ½ acre to less than ¾ acre. ¾ acre or more.	2 59 60 60	100 58 63 77	0 42 37 23	100 78 92 90	0 22 8 10
Αl	COUNTY IN OHIO	201	94	6	90	10
	Without garden With garden	10 191	90 94	10 6	100 90	0 10
	Including any potato and sweet-corn patch	104	95	5	87	13
	Less than ¼ acre. ¼ acre to less than ½ acre ⅓ acre to less than ¾ acre ⅓ acre to less than ¾ acre. ¾ acre or more.	38 42 20 4	95 93 100 100	5 7 0 0	76 95 85 100	24 5 15 0
	Not including potato and sweet-corn patch_	87	93	7	93	7
	Less than ¼ acre	20 46 19 2	95 89 100 100	5 11 0 0	95 91 95 100	5 9 5 0

¹ No report by 2 families.

Table 28.—Level of money value of food and quality of diets, distributions of farm families in a Georgia county and an Ohio county, early summer 1945

		Diets in least sa tory d	tisfac- ietary	Diets ft	ır n ishing per 1	specified nutrition	d quanti unit per	ties of nu day	itrients
Location and money value of food ¹ per person per week	Fami- lies	essenti vides si percent recomn allow	of NRC nended	Vitan value (l tional	nterna-	Calciur ligra	n (mil-	Ascorb (millig	
		67 or more	66 or less	3,350 or more	3,340 or less	536 or more	535 or less	50 or more	49 or less
COUNTY IN GEORGIA									
Money value of all food: \$0-\$1.99	Number 54	6	Percent 94	30	Percent 70	Percent 39	61	Percent 63	Percent 37
\$2,00-\$2,99 \$3,00-\$3,99	55 55	20 65	80 35	38 69	62 31	71 93	29 7	82 95	18 5
\$4.00-\$4.99 \$5.00-\$5.99	39 26	87 96	13 4	92 100	8	100 96	0 4	92 100	8 0
\$6.00 or more Expense for bought food:	20	100	0	100	0	100	0	100	0
\$0-\$0.99 \$1.00-\$1.49	140 58	45 57	55 43	58 69	42 31	73 79	27 21	84 86	16 14
\$1.50-\$1.99	36	64	36	72	28	92	8	38	17
\$2.00 or more Money value of home-	15	67	33	67	33	93	7	100	0
produced food: \$0-\$0.99	52	15	85	33	67	50	50	58	42
\$1.00-\$1.49 \$1.50-\$1.99	38 33	11 36	89 64	32 45	68 55	58 79	42 21	82 94	18
\$2.00-\$2.99 \$3.00-\$3.99	51 38	63 95	37 5	76 97	24 3	90 100	10	92 97	6 8 3
\$4.00 or more	37	100	0	100	ő	100	ő	100	. 0
COUNTY IN OHIC									
Money value of all food: \$0-\$1.99	8	38	62	38	62	62	38	50	50
\$2.00-\$2.99 \$3.00-\$3.99	30 50	43 74	57 26	87 96	13	80 90	20 10	83 86	17 14
\$4.00-\$4.99	45 37	87	13	98	2 0	98	2	91	9
\$5.00-\$5.99 \$6.00 or more	31	100 100	0	100 100	0	100 100	0	100 100	0
Expense for bought food: \$0-\$0,99	29	59	41	86	14	79	21	83	17
\$1.00-\$1.49 \$1.50-\$1.99	60	72 82	28 18	88 98	12	92 92	8 8	88 88	12 12
\$2.00 or more Money value of home-	63	95	5	100	ō	100	ŭ	97	3
produced food: \$0-\$0.99	24	67	33	75	25	83	17	79	21
\$1.00-\$1.49	19	67 47	53	89	11	84	16	79	21
\$1.50-\$1.99 \$2.00-\$2.99		67 82	33 18	93 100	7 0	85 94	15 6	89 88	11 12
\$3.00-\$3.99 \$4.00 or more	39 24	95 100	5	95 100	5	100 100	0	100 100	0

¹ Home-produced food valued at retail prices paid by families surveyed.

Table 29.—Per capita income in relation to family income, distributions of farm families in a Georgia county, year 1944-45

			Famili	es having	specified i	net cash ir	ncome per	person
Net cash family income	All fa	milies	\$0-\$44	\$45-\$94	\$95–\$144	\$145-\$194	\$195–\$294	\$295 or more
All families	Number 1 239	Percent 100	Percent 13	Percent 18	Percent 22	Percent 17	Percent 15	Percent 15
\$0-\$494_ \$495-\$994_ \$995 or more	94 97 48	100 100 100	31 0 0	28 16 0	27 22 15	12 27 8	1 26 21	1 9 56

 $^{^{1}}$ Excludes 10 families: 6 with negative incomes, 1 with no report on income, and 3 families established less than 1 year.

Table 30.—Per capita income in relation to family income, distributions of farm families in an Ohio county, year 1944-45

		1								
				Fam	ilies hav	ing speci	fied net c	ash inco	ne per pe	erson
Net cash family income		All families		\$0-\$94	\$95- \$194	\$195- \$294	\$295- \$494	\$495- \$744	\$745- \$1,244	\$1,245 or more
All families		Number 1 177	Percent 100	Percent 6	Percent 18	Percent 12	Percent 22	Percent 19	Percent 12	Percent 11
\$0-\$494 \$495-\$994 \$995 or more		22 43 112	100 100 100	41 2 0	55 40 1	4 21 11	0 37 21	0 0 29	. 0 0 20	0 0 18
\$995-\$1,994 \$1,995-\$2,99 \$2,995 or m		65 25 22	100 100 100	0 0 0	3 0 0	18 0 0	28 20 0	36 32 9	15 24 27	0 24 64

 $^{^{1}}$ Excludes 24 families: 6 with negative incomes, 16 with no report on income, and 2 families established less than 1 year.

Table 31.—Over-all quality of diets of FHA borrowers and others, distributions of farm families in a Georgia county, early summer 1945

_											
			FHA b	orrower	families			Ot	her famil	ies	
	et cash family income for year, race, and farm tenure	Fam- ilies	House- hold size in equiv- alent per- sons ¹	Average net cash family income for year	Diets ir least sati dietary e provide fied per NRC i mended and	sfactory ssential s speci- cent of recom- l allow-	Fam- ilies	House- hold size in equiv- alent per- sons ¹	Average net cash family income for year	fled percent o NRC recom- mended allow ances	
			30113		67 or more	66 or less		30113		67 or more	66 or less
A	ll families	Num- ber 53	Num- ber 5.80	Dollars 778	Percent 75	Percent 25	Num- ber 194	Num- ber 4.54	Dollars 740	Percent 45	Percent 55
	\$0-\$494 \$495-\$994 \$995 or more	14 17 17	4. 85 6. 23 6. 41	316 717 1, 361	64 76 82	36 24 18	79 79 31	4. 15 4. 99 4. 42	288 689 2, 109	37 48 61	63 52 39
	White families	27	5.48	734	81	19	91	4. 43	1, 008	66	34
	Owners, rent- ers Share croppers,	23	5.36	652	78	22	51	4.40	1, 237	82	18
	laborers	4	6. 14	1, 205	100	0	40	4. 47	717	45	55
	Negro families	26	6.14	820	69	31	103	4. 64	501	27	73
	Owners, rent- ers Share croppers,	22	6.39	885	73	27	29	4.32	553	31	68
	laborers	4	4.75	340	50	50	74	4. 76	48C	26	74

^{&#}x27; Represents household size in 21-meal-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person, regardless of sex, age, or physical activity and fewness of meals consumed by individuals. To compute household size in persons, total meals were divided by 21.

APPENDIX C. METHODOLOGY Design and Analysis of Sample

The study was set up to find out the quality of diets in the open country of a northern and a southern county. In addition, the sample was originally designed to provide a comparison of the data collected on the two schedule forms, the food record and the food list described on pages 80–81. The schedule comparison was planned for the northern county but was not carried out in the analysis.

The northern county is in Ohio and the southern one in Georgia. Both are removed from metropolitan influence and each has a relatively large number of dwellings in the open country. Because the average farm income and level of living were low in these counties, the results are not to be considered representative of the States nor the regions in which they are located.

Universe

Within each county, a cross section of housekeeping families living in the open country was to be asked to provide food records. Families were considered to be housekeeping if they usually prepared at least one meal a day at home. The open country is defined as that part of the county which is neither urban nor "built-up."

An additional group of families in Ohio was to be asked to provide food lists. This group of families was to be as much like the Ohio families to be asked for food records as the sample design would permit.

Sample size

Approximately 270 food records were desired in the Georgia county and 150 in the Ohio county. It was estimated that about 20 percent more dwelling units would have to be visited to allow for vacancies, for ineligible families, and for those who would be unable or unwilling to provide the information requested for the record. The sample was designed to include the 20 percent allowance so that no direct substitution would be necessary for a nonparticipating dwelling unit.

Two hundred food lists were also wanted in the Ohio county. All families were expected to be willing to provide the food list. Therefore no extra visits were provided for in the sample design.

Within-county sample design

The area sampling method was used to select the families to be visited. The Georgia county open-country area was divided into small segments with clearly defined boundaries, each expected to contain, on the average, six dwelling units. Fifty-five areas were required, therefore, and they were selected systematically starting with a random number between 1 and n and taking every nth area thereafter; n is determined by dividing the total number of areas in the county by the number of areas required.

The areas in the Ohio county in which food records were to be requested were selected in the same manner. So that the food-record sample and the food-list sample would be parallel, an area next to each food-record area was selected for the food-list sample. Because more food lists than food records were to be obtained, a few extra areas were selected at random and included in the food-list sample.

¹ Urban as defined by Census is applied, in general, to cities and other incorporated places having 2,500 inhabitants or more.

²The built-up area includes all incorporated places other than urban, all other name places with an estimated population of 100 or more, and all other areas which have a population density of 100 or more persons per square mile.

All dwellings in the sample areas were visited and all eligible families were asked to provide schedule data.

As the field work progressed, it was obvious that more visits than first planned would be required. Additional sets of areas were selected by the same procedure as the originals.

Summary of visits

Table 32 summarizes the results of the visits.

The families that were ineligible to provide food records were about evenly divided between those that were nonhousekeeping families and those that moved during the week the record was to be kept.

Participation in a survey of this type is entirely voluntary. Ordinarily families are willing to cooperate. The response in the Georgia county is fairly typical, but in the Ohio county in the summer of 1945 there was considerable resentment against the Government's sugar rationing program. A cut in the allowance of sugar for canning coincident with the beginning of the study caused some to feel that the Government was using this study as a means of checking up on hidden supplies.

Table 32.—Results of visits for food records and food lists, by county

	Georgia county		Ohio county	
Visits	food record sample	Both samples	Food record sample	Food list sample
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	469 23 77 3 2 3 94 83 17	(3) 98 50 50 149	262 17 83 3 (3) 97 27 73 (3) (3) 73	307 14 86 1 0 99 69 31 2 29

¹ Person not in family provided enough information to determine that family was eligible.
² A few families could not be reached because roads were washed out.

3 Less than ½ of 1 percent.

This feeling was particularly noticeable among the Ohio families asked to keep the food record. Twenty-six percent stated their resentment. Another 33 percent said they were "too busy." Fourteen percent more refused because of illness in the family or other reasons.

The Ohio families who were asked to fill the food list were less unwilling to participate. Seventeen percent stated their objection to the study, 9 percent said they were too busy, and 3 percent gave other reasons.

Thus 73 percent of those in Ohio asked to keep a food record and 29 percent of those requested to fill a food list did not participate. Pooling the two samples results in a refusal rate of 49 percent.

The families visited in the Georgia county, where only records were requested, were more receptive. Only 2 percent expressed resentment, 7 percent said they were too busy, and another 6 percent refused because of illness in the family or other reasons. Thus a total of 15 percent refused the requested information.

Analysis of sample

When some families do not provide the requested information, it is important to know how well those who do supply the data represent the population being described. Some of the characteristics of families that might influence their food

consumption are compared in table 33 for participating and eligible nonparticipating families. The first two refer to household composition; the next three might be considered indicators of economic level. Admittedly, these characteristics provide only a rough means of comparison.

In the Georgia county, although there are some differences between the participating and nonparticipating eligible families, there are not enough nonparticipating families to influence the averages for all eligible families for the items shown in table 33.

In general, the same may be said of the families providing food lists in Ohio. There is some indication of difference in household composition between the families that provided food records in Ohio and those that refused to do so. This difference would be important if the food records were analyzed separately, but, when the records and lists are pooled, the nonparticipating families carry less weight among all eligible families.

Table 33.—Characteristics of eligible families, by county

	Geor	gia cou	inty				Oh	io cour	nty			
		od reco			record t samp			od reco sample		Food list sample		
Characteristics	All families	Par- tici- pat- ing fam- ilies	Non- par- tici- pat- ing fam- ilies	All fam- ilies	Par- tici- pat- ing fam- ilies	Non- par- tici- pat- ing fam- ilies	All fam- ilies	Participating families	Non- par- tici- pat- ing fam- ilies	All fam-ilies	Par- tici- pat- ing fam- ilies	Non- par- tici- pat- ing fam- ilies
Household members 1 (mean)number Households with child	4.6	4. 7	4. 2	3. 3	3. 5	3. 1	3. 3	3. 7	3. 2	3.3	3.4	2. 9
5 years or younger percent	38	37	41	23	26	20	27	37	23	20	23	14
3. Households with electricitypercent_4. Households with auto-	31	30	37	58	58	58	58	58	58	58	58	59
mobilepercent 5. Households with both	37	34	53	79	80	78	78	77	78	80	81	78
electricity and auto- mobilepercent 6. Households on farms	18	16	27	54	54	52	51	53	50	54	54	55
percent	88	89	86	84	86	81	80	80	80	87	88	84

¹ Refers to a simple count of members living in the household at the time of the survey.

Collection of Schedules

The field work in each county was done by local residents. These were selected to meet certain qualifications by a supervisor from the Bureau's staff. A training school lasting about 1 week was held for the interviewers. Written instructions giving detailed explanations of every entry on the reporting form were furnished the interviewers for use during training and for reference during collection of data. The supervisor maintained a centrally located office in the county, was available for individual conferences with interviewers at their convenience, and held group conferences regularly each week.

Interviewers were instructed to visit all dwelling units in the sample areas assigned and to obtain schedules from all economic families that usually prepared at least one meal a day at home (termed housekeeping families in this study). See page 84 for definition of economic family.

Information requested

Each housekeeping family was asked to furnish detailed information on food consumed at home during a week as well as information on income, food expenditures, and food produced at home during a 12-month period. In the Georgia county, all families were asked to furnish daily menus and a food record, which

included a weighed inventory of foods on hand at the beginning and close of the week and a day-by-day record of quantity and expense for food brought into the home. An interviewer visited each family daily to assist the homemaker in keeping the record. In the Ohio county some families were asked for similar records while others were asked to give food lists which included an estimate of the quantities and expense for food used during the previous 7 days and of the number of meals had by each household member from home food supplies. The food list necessitated only one visit by the interviewer. All families were asked for an estimate of the quantity of family food going to animals during the period of the food report. Edible food brought into the home for the express purpose of feeding to animals was carefully excluded from both the food records and the food lists.

For both lists and records, a report was made on the sex, age at last birthday, and number of meals furnished from family food supplies in the 7 days covered by the food schedule for each family member, boarder, guest, or paid helper in the household; the degree of physical activity was obtained for each adult, also. Height and weight were obtained for household members in families giving food records but not for those in families giving food lists.³

Giving the data was entirely voluntary and no payments were made to households participating. While most families gave both annual and weekly data, some furnished data on annual income and food expenditures and production for family use but were unable or unwilling to furnish data on food consumed during the week. On the other hand some families gave the weekly data but were unable or unwilling to furnish all the information necessary to compute their annual net cash family income.

Periods covered by the survey

The food schedules represented food consumption in the early summer of 1945. Collection of schedules began in the Ohio county around the latter half of May and was finished by July 21; in the Georgia county collection was later by about 10 days, starting after the first of June and finishing around the first of August (table 34).

Table 34.—Dates of collection of food reports, open-country families in a Georgia county and an Ohio county, early summer 1945

•															
						Dis	stribu	tion o	f food	repor	ts 1				
Location, race, and	All	Peri	od of					We	ek of	collect	ion				
farm tenure	re- ports	May 20- June 30	July 1- Aug. 11	May 20-26		June	June 10-16	June 17-23	June 24–30	July 1-7			July 22 -2 8		Aug. 5- 11
COUNTY IN GEORGIA	Num- ber 282	Per- cent 50	Per- cent 50	Per- cent 0	Per- cent 0	Per- cent 11	Per- cent 12	Per- cent 15	Per- cent 12	Per- cent 13	Per- cent 10	Per- cent 16	Per- cent 2	Per- cent 7	Per- cent 2
Farm families: White Negro	119 130	53 44	47 56	0	0 0	12 12	10 14	16 9	15 9	13 12	6 11	16 16	4 2	7 10	1 5
Owners, renters Share croppers, laborers	126 123	43 55	57 45	0	0	11 13	10 14	12 14	10 14	10 14	11 6	18 14	4	8	6
COUNTY IN OHIO	239	72	28	4	10	20	10	16	12	15	13	(2)	0	0	0

¹ Percentages are based on the total number of families in each class (col. 2). A food report was classified as covering a given week if 4 or more days fell within the dates specified above.
² 0.5 percent or less.

³ See Nutrition Surveys—Their Techniques and Value, National Research Council Bulletin 117, 1949, for facsimiles of parts of typical food record and food list used by the Bureau of Human Nutrition and Home Economics.

Families were permitted to report income data for any continuous 12-month period they chose between January 1, 1944 and June 30, 1945. The 12-month period selected by most families for reporting income information was the calendar year 1944; this was selected by nearly 70 percent of all the families that reported income. With the Ohio families the 12-month period ending with the first quarter of 1945 was second choice, while the Georgia families gave second choice to a period closing with the month-end just preceding the interviewer's visit (table 35).

Annual data on expenditures for food and on quantity of food produced and used for home consumption were requested for the period April 1944 to March 1945 from all families regardless of the 12-month period selected for reporting income data.

Table 35.—12-month period selected for reporting annual income data, opencountry families in a Georgia county and an Ohio county, early summer 1945

		Distribution of families by ending date of year selected							
Location, race, occupation, and farm tenure	All	Dec. 31, 1944	Jan. 31- Apr. 30, 1945	May 31, 1945	June 30, 1945				
COUNTY IN GEORGIA	Percent 100	Percent 61	Percent 1	Percent 25	Percent 13				
White families Negro families	100 100	59 63	2 1	29 21	10 15				
Farm familiesNonform families	100 100	63 55	(1) 3	26 19	11 23				
Owners, rentersShare croppers, laborers	100 100	65 58	1 1	26 26	8 15				
COUNTY IN OHIO All families	100	80	² 10	4	€				
Farm families Nonfarm families	100 100	82 67	² 10 ² 9	4 6	4 18				

¹ Less than 0.5 percent.

Classification of Families

Occupation and tenure

Families that operated farms during the year and families whose chief income during the year consisted of wages earned through labor on a farm were classified as farm families. The definition of farm that is used by the Census of Agriculture was followed and is given here: The land, in one or more tracts, on which some agricultural operations are performed by one person, either by his own labor alone or with the assistance of members of his household or hired employees. A tract of fewer than 3 acres was not called a farm unless its agricultural products during the preceding year were valued at \$250 or more. Families that lived in the open country but did not operate a farm themselves or whose chief income was not derived from labor on farms operated by others were classified as nonfarm families.

Farm families in Georgia were divided into two groups on the basis of entrepreneurial risk. Owners and renters who paid rent in cash or in farm products and usually owned their stock and equipment are included in the group called owners and renters. Renters who were allowed a proportion of the crop in return for farming operations performed with stock and equipment usually owned by the landlord and families whose chief income consisted of earnings as laborers on farms are included in the group called share croppers and laborers. Families of farm managers and overseers are included as nonfarm families.

^{2 9} percent selected year ending Mar. 31, 1945.

Income

In this study families were classified by two types of net cash income. The major classification used for tabulating purposes was by family income for the year and a minor classification was by per capita income.

Family income.—The net cash family income for the year includes money receipts by all members of the economic family as follows: Cash income from farm operations; money wages and salaries, net cash income from self-employment at jobs or business other than a farm; net receipts from roomers and boarders; and cash income from other sources.

Net cash income from farm operations was determined as the difference between gross farm income and farm-operating expenditures. Gross farm income includes the receipts from sale of and Government loans on farm products, Government payments, and amounts received from the use of farm equipment. Nonmoney income from farm-furnished food 4 and fuel, the rental value of farm dwellings, and the value of the change in livestock owned and crops stored are not included in the figure for gross farm income used in this study to classify families.

Farm-operating expenditures were itemized as follows: Cash rent for rented land and buildings; taxes and insurance; interest and refinancing charges; wages of hired labor; machine hire, contract machine and custom hire; cost of livestock and poultry purchased; cost of feed purchased; fertilizer, liming materials; ginning, bagging, ties; seeds, bulbs, plants, trees; spray material; insecticides, fungicides: containers, hardware, harness, rope, twine; electricity; repairs on buildings and fences; repairs on farm machinery, tractors, trucks, including automobile; gasoline, oil, tires, distillate for farm machinery; food expense for farm help (computed as described below for boarders); water, irrigation, storage, freight, and other expenses chargeable to farm business. Depreciation of farm buildings and of farm machinery was not taken into account. The cost of electricity in the dwelling, and of operating the automobile for family use, and the expense for repairs on the dwelling are included as farm expenses.

Money wages and salaries included net receipts from employment, including any amounts withheld by employers for insurance and retirement funds, the old age and survivor's insurance tax, and unemployment insurance tax. Tips and bonuses were included in the total wages and salaries. Net cash income from self-employment in jobs or business other than a farm was reported by the respondent as a single amount representing the difference between gross receipts and expenses incurred in the business.

Net receipts from roomers and boarders were determined by deducting from the total receipts an estimate of the cost of food to boarders. The cost of food to boarders was considered to be the proportion of total cost of home food supplies represented by the number of meals served to boarders in relation to the total number of meals served from home food supplies.

Money income from sources other than farm operations, other self-employment, wages and salaries, and roomers and boarders, was itemized on the schedule as follows: Net rents from real estate; interest from bonds, savings accounts, mortgages, and loans; dividends from stocks and cooperatives; net income from business owned but not operated by family members; money receipts based on military service, including mustering-out pay, disability pensions, allowances for rehabilitation, and unemployment benefits; dependency allotments and contributions from members of the armed forces; contributions for support received from persons not in the family; pensions, retirement benefits, unemployment insurance payments, and workmen's compensation: periodic payments received from insurance, annuities, trust funds; cash relief payments and vouchers and other money receipts.

Eight families in the Ohio county gave incomplete income information but enough to indicate the income class in which they might properly be placed. The average income for the class was imputed to these families. Two of the families were placed in the lowest income class and six in income classes above the average for all families.

⁴ Some families included as farm families because the value of home-produced food was at least \$250, had no cash income from farm operations.

Per capita income.—Net cash income per person is used also for classification of families included in this study. It was computed by dividing the net cash family income for the year by the number of persons in the economic family during the income period.

Race

Members of all races were eligible but only white and Negro families were found in the sample selected. Georgia families were classified by race for purposes of comparison. Ohio families were not studied separately by race since only a few families were other than white.

Time in dwelling

Families were asked to state the number of years (or months, if less than 1 year) they had lived in the dwelling they occupied at the time of the interview. Farm families were classified according to whether they had lived on their place 3 years or more or less than 3 years. See table 26 for example of use of this classification.

FHA (formerly FSA) activity

On the basis of answers to the question, "Has the family ever borrowed money from the Farm Security Administration?" families were included in one of two groups for certain tabulations: (1) FHA borrowers, and (2) others (table 31).

Measurement of Household Size

Economic family size

The economic family was defined as a single person who lives as an independent spending unit or a group of persons who are dependent upon a common or pooled income, usually reside under the same roof, and share the food supply. Usually members of the family are related by blood or marriage. Related persons who were only partially dependent upon the common income, such as earning sons and daughters or elderly parents with some income, were usually included as family members because in such cases the household usually provides services not made available to unrelated boarders; only in cases where there was a clear separation of finances were they excluded. Persons who were members of the economic family for a month or more at any time during the period of the income report were included.

The total number of weeks in the economic family for all family members was divided by 52 to compute the number of persons in the economic family. Families in the Ohio county averaged 3.4 equivalent persons; in the Georgia county white families averaged 4.4 equivalent persons and Negro families, 4.9 equivalent persons. The chief use of economic family size was in determining net cash income per person for the year.

Household size in equivalent persons

Average household size in equivalent persons during the period of the food report is shown in table 4 by location, occupation, net cash family income, race, and farm tenure for families giving acceptable food schedules.

Size of family in respect to food consumption needs to be based on a count of the meals served from family food supplies during the week. The number of persons in the household during the week is not enough for this computation because it cannot be assumed that all household members ate their 21 meals from family food supplies or that meals away from home and meals eaten by persons not in the household balance for individual families. A comparable measure of household size in terms of equivalent persons for all families was derived

by dividing the total number of meals served to all persons during the week of the food report by 21, the usual number served to each person in a week. Meals for an entire week were considered as 21, even though more (as for infants or invalids) or fewer (as for persons omitting breakfasts or the Sunday evening meal) were reported as consumed. The count of family meals included meals carried from home supplies but excluded any purchased and eaten away from home and any received as a gift or pay.

In this computation, based only on the number of meals, each individual, regardless of sex, age, or physical activity, was considered equally important insofar as food consumption was concerned. The chief use made of household size computed in terms of equivalent persons was in determining the average consumption per person of various foods or groups of food (tables 15 and 18).

Household size in equivalent nutrition units

Household size in nutrition units refers to the size of a particular household or group of households in terms of recommendations for calories and specific nutrients, such as protein, calcium, iron, or the vitamins. The scale of relatives used in this study for determining household size in terms of equivalent nutrition units, shown in table 36, was derived from the daily allowances for calories and the specific nutrients recommended by the Food and Nutrition Board of the National Research Council, August 1945 (table 37). The dietary needs of a moderately active man of average height were considered equal to one nutrition unit; the needs of other sex-age-activity groups are expressed in relation to those of the moderately active man of average height. Table 38 shows the composition of the average household by sex-age-activity groups.

Table 36.—Scale of relatives for determining household size in terms of equivalent nutrition units for food energy and eight nutrients by classification for sex, age, and physical activity 1

			Equi	valent nı	ıtrition u	mits		
Persons	Food energy	Pro- tein	Cal- cium	Iron	Vita- min A value	Ascor- bic acid	Thia- mine and niacin	Ribo- flavin
MAN Moderate activity Severe activity Light activity Resting WOMAN	1.0 1.5 .8 .6	1.0 1.0 1.0 1.0	1.0 1.0 1.0 1.0	1.0 1.0 1.0 1.0	1.0 1.0 1.0 1.0	1.0 1.0 1.0 1.0	1.0 1.3 .8 .8	1.0 1.3 .8
Moderate activity Severe activity Light activity Resting Pregnancy (latter half) Lactation CHILDREN	.7	.9 .9 .9 .9 1.2 1.4	1.0 1.0 1.0 1.0 1.9 2.5	1.0 1.0 1.0 1.0 1.2 1.2	1.0 1.0 1.0 1.0 1.2 1.6	.9 .9 .9 .9 1.3 2.0	.8 1.0 .7 .7 1.2 1.3	.8 1.0 .8 .8 1.2 1.5
Boys: 16-20 years	1.3 1.1 .8	1.4 1.2 1.1 1.1	1.8 1.8 1.2 1.6	1. 2 1. 2 1. 2 1. 2	1. 2 1. 0 1. 0 1. 0	1.3 1.2 1.1 1.1	1.2 1.0 .8	1. 2 1. 0
Boys and girls: 10-12 years 7-9 years 4-6 years 1-3 years Under 1 year	.8 .7 .5	1.0 .9 .7 .6	1.5 1.2 1.2 1.2 1.2	1.0 .8 .7 .6	.9 .7 .5 .4	1.0 .8 .7 .5	.8 .7 .5 .4	.9 .8 .6 .4

Based on Recommended Dietary Allowances, National Research Council Reprint and Circular Series No. 122, revised 1945. See table 37.
 For moderate activity. Relatives for light and severe activity are 0.8 and 1.1, respectively.

Table 37.—Dietary allowances per day for persons of specified sex, age, and physical activity

Persons	Food energy	Protein	Cal- cium	Iron	Vita- min A value ²	Ascor- bic acid	Thi- amine	Ribo- flavin	Nia	cin
MAN (154 POUNDS) Moderate activity Severe activity Light activity Resting WOMEN (123 POUNDS)	³ 3,000 ³ 4,500	Grams 70 70 70 70 70	Grams 0.8 .8 .8	Milli- grams 12 12 12 12	Inter- national Units 5,000 5,000 5,000 5,000	Milli- grams 75 75 75 75	Milli- grams 1.5 2.0 1.2 1.2	Milli- grams 2.0 2.6 1.6 1.6	Mil	
Moderate activity Severe activity Light activity Resting Pregnancy (latter half) Lactation	³ 2, 100 ³ 1, 500	60 60 60 60 85 100	.8 .8 .8 1.5 2.0	12 12 12 12 12 15 15	5,000 5,000 5,000 5,000 6,000 8,000	70 70 70 70 100 150	1. 2 1. 5 1. 1 1. 1 1. 8 2. 0	1.6 2.0 1.5 1.5 2.5 3.0		12 15 11 11 18 20
CHILDREN 5 Boys: 16-20 years	3, 200 2, 400 2, 600	100 85 75 80	1.4 1.4 1.0 1.3	15 15 15 15	6,000 5,000 5,000 5,000	100 90 80 80	1.8 1.5 1.2 1.3	2.5 2.0 1.8 2.0		18 15 12 13
10-12 years	1,600	70 60 50 40 3.5/2.2 1b.	1.2 1.0 1.0 1.0 1.0	12 10 8 7 6	4,500 3,500 2,500 2,000 1,500	75 60 50 35 30	1.2 1.0 .8 .6 .4	1.8 1.5 1.2 .9		12 10 8 6 4

¹ Based on Recommended Dietary Allowances, National Research Council Reprint and Circular Series No. 122, revised 1945. Tentative goal toward which to aim in planning practical dietaries; can be met by a good diet with a variety of natural foods. Such a diet will also provide other minerals and vitamins, the requirements for which are less well known.

² Requirements may be less if provided as vitamin A; greater if provided chiefly as the pro-vitamin,

were used.

Allowances are based on needs for the middle year in each group (2, 5, 8, etc.) and are for moderate activity

and for average weight at the middle year of the age group.

*Needs of infants increase from month to month with size and activity. The amounts given are for those approximately 6-8 months old. The amounts of protein and calcium needed are less if derived from human

³ Used in this report for persons of average height. The recommended allowances were reduced by 300 calories for men and women under 5 feet, increased by 300 calories for men from 6 feet to 6 feet 5 inches and for women 5 feet 8 inches or more, and increased by 1,500 calories for men feet 6 inches or taller. In Georgia, about 90 percent of the men were between 5 and 6 feet in height, 10 percent were more than 6 feet, and a few were under 5 feet. About 90 percent of the women also fell in the middle group with about 5 percent under 5 feet and about 5 percent 5 feet 8 inches or taller. Similar data for Ohio families are not available.

⁴ For moderate activity. For severe and light activity 3,300 calories and 2,500 calories, respectively, were used

Table 38.—Composition of households by sex, age, and physical activity of members, distributions of persons in open-country families in a Georgia county and an Ohio county, early summer 1945

		Un- der 1 year	Cent 2.1 1.9 1.9 1.9 3.2	6.6.6. 4.0.8.9. 4.0.8.8.0	$\frac{1.3}{1.0}$
	Children under 13 years	years do y	Per- I cent c 8.1 7.9 7.4 9.3	7. 2 6. 7 6. 8 6. 8 13. 1	7.3
	der 13	4-6 1 years ye	Cent Cont Cont Cont Cont Cont Cont Cont Co	40332	5.4
	ren un			89 6.7.7 99 8.6.7.7	517
	Childr	2 7-9 s years	Per- cent 7.7 7.7 7.7 7.7 6.4		ල් ල්
		10-12 years	Per- cent 8.4 8.4 9.0 7.7	10.0 9.9 10.3 9.6	6.8 8.2
	Girls	13-15 years	Per- cent 3.7 3.3 3.5 2.9	4.7.7.4.2. 8.0.7.5.2	23.3
1 sque	C	16-20 years	Per- cent 2:9 2:9 2:4 3:7	5.2 7.6 1.3 1.3	2.5 2.7 1.6
/ity gro	ys	13-15 1 years y	Per- cent 3.7 3.6 3.1 5.1 5.1	4.4.9.7.1 0.9.7.8.0	23.55
Persons in specified sex-age-physical activity groups $^{\rm I}$	Boys	16-20 years	Per- cent 4.5 5.0 3.5 7.7	4.7.4.7.0 7.04.8	3.3
physic		Lae- ta- tion 4	Per- cent 1.3 1.4 1.7 1.0	66.69.49 406.80	6.1.2
ex-age-		Preg- nan- ey ³	Per- cent 0.6 .7 .3 1.4	1.0	28
eiffed s	nen	Rest- ing	Per- cent 1.0 .9 .1.4 .1.4	6. 7. 1. 6. 1.	8.1 4.1
in spe	Women	Light activ- ity	Per- cent 5.6 5.7 5.7 7.7	429.93	10.5 9.8 14.3
ersons		Se- vere aetiv- ity	Per- cent 22.9.5.4 0.2.8 0	2,2,2,4, 6,6,4	1.9
1		Mod- erate activ- ity	Per- cent 17.4 17.5 18.3 15.9 17.8	12.9 13.0 13.1 13.0	17.6 18.5 12.4
		Rest-	Per- cent 0.4 0.1 0.3 2.8	0.5	.8
	Men	Light activ- ity	Per- cent 1.8 1.8 2.2 1.0	1.8	3.4
	M	Se- vere aetiv- ity	Per- cent 2:22 2:52 2:50 0.00	1.4 1.2 0 2.0 3.3	3.3
		Mod- erate aetiv- ity	Per- cent 18.0 18.2 18.2 18.0	17.2 17.5 18.7 16.9 13.0	21.3 23.4 9.4
		АШ	Per- cent 100.0 100.0 100.0 100.0	100.0 100.0 100.0 100.0	100.0 100.0 100.0
	hold size in	alent per- sons 1	Num- ber 4,56 4,65 4,68 4,68 3,85	4. 4. 78 4. 4. 72 5. 22 17. 4. 73 8. 82	3.53 3.55 55
	Location, race, occupation,	and farm tenure	White families Parm families Owners, renters Share ecopyers, laborers. Nonfarm families	Negro families Farm families Owners, ronters Shane eroppers, laborers Nonfarm families	COUNTY IN OHIO All families. Farm families. Nonfarm families.

¹ See table 37, footnote 3, for distribution by height.
² Represents household size in 21-meal-equivalent persons. Twenty-one meals consumed from family food supply considered equal to the consumption of 1 person regardless of sex, age, or physical activity and fewness of meals consumed by individuals. To compute household size in persons, total meals were divided by 21.
³ Latter half of pregnancy; any activity.

'Any activity.

In 1948, after computations for nutritive value of the diets were completed, the National Research Council released a revised edition of the recommended dietary allowances; in it were changes for calories and four nutrients. Allowances for calcium were raised and those for riboflavin, thiamine, niacin, and calories were lowered for persons of certain sex, age, and physical activity from the 1945 recommendations.

The nutritive value of the diets covered in the publication have not been re-computed on the 1948 basis, because the small size of the changes did not seem to warrant the work involved. Instead, the probable effects of the two major revisions were studied to get some estimation of the importance of their effect on the quality of the diets. Adjustment factors were derived for converting average values for calcium and riboflavin per nutrition unit per day from the 1945 NRC basis to the 1948 NRC basis and for shifting the distribution of families by the levels of calcium and riboflavin in their diets.

The factor for converting calcium from the old basis to the new was found to be 1.15 for the families in the two counties; applying the factor, the average calcium per nutrition unit increases numerically from 0.8 to 0.9 gm. for the Georgia diets and from 1.1 to 1.3 gm. for the Ohio diets. Since there was indication that not even 5 percent fewer families in each county met the new higher calcium allowances than the old, it was decided that the dietary situations would not be greatly overrated by use of the 1945 calcium allowances.

For riboflavin a conversion factor of 0.95 was found to decrease the average content of the Georgia diets from 2.3 mg, of riboflavin per nutrition unit per day on the 1945 NRC allowance scale to 2.1 mg, on the new scale, and the Ohio diets from 2.8 to 2.7 mg. A few more diets met the lowered yardstick for riboflavin, but the improvement was not marked. By convenient coincidence, the 1948 revision of the recommended allowances for riboflavin about offsets the estimated losses of riboflavin in cooking. Riboflavin values on the 1945 basis that are given in the tables can, therefore, be considered adjusted for the 1948 NRC revision and probable cooking loss.

The adjustment factors for calcium and riboflavin given above are limited to use with averages for groups of families composed of men, women, and children. They are not applicable to the diets of individual families because of differences in family composition. The larger the proportion of adults to children, the larger the effect of the calcium revisions since changes were made only in NRC recommended calcium allowances for adults.

No study was made of the effect of the 1948 revisions to thiamine, niacin, and calories since the calcium and riboflavin changes, which would affect more persons in the population, proved fairly negligible.

Table 39 .- Four grades of diet quality 1

Dietary essential	Percent of NRC re by quantities of food			
	100 or more	67-99	34-66	33 or less
Food energy calories	3,000 or more	2, 010-2, 990 47-69 536-799 8. 0-11. 9 3, 350-4, 990 50-74 1. 00-1. 49 1. 34-1. 99 10. 0-14. 9	$\begin{array}{c} 990-2,000 \\ 23-46 \\ 264-535 \\ 4,0-7,9 \\ 1,650-3,340 \\ 25-49 \\ 0.50-0.99 \\ 0.66-1.33 \\ 5.0-9.9 \end{array}$	980 or less. 22 or less. 263 or less. 3. 9 or less. 1,640 or less. 24 or less. 0. 49 or less. 4. 9 or less.

¹ Adapted from Recommended Dietary Allowances, National Research Council Reprint and Circular Series No. 122, revised 1945.

Food Composition Values

Food values published in 1945 by the Bureau of Human Nutrition and Home Economics in Tables of Food Composition in Terms of Eleven Nutrients, Miscellaneous Publication No. 572, were used in calculating the nutritive values of the diets wherever possible. For foods not included in that publication, values were based on other compilations, on original data in the literature, or on results of analyses made in the laboratories of the Bureau.

Nutrient Losses in Cooking

Nutritive values of the food were computed from tables providing data on the composition of food as it enters the family kitchen. Before being served most foods undergo cooking or some other form of preparation which usually causes reduction of nutritive value. When evaluating the adequacy of diets it is therefore important to take account of losses that may occur, at least in the most vulnerable nutrients. These perhaps are ascorbic acid and the B-vitamins. Retentions of these in the diets studied here were estimated to be: Ascorbic acid 55 to 70 percent; thiamine and niacin 80 to 90 percent; and riboflavin 90 to 95 percent.

In deriving these figures, consideration was given to the amounts of different foods eaten and the type of preparation they were thought to undergo." These figures do not allow for the excessive nutrient losses that would occur if poor cooking practices were always followed, and they do not allow for unusual waste in food preparation. It is recognized that such losses may be considerable in some cases. On the other hand, the retention factors are not based on the best cooking practices: doubtless in some families a greater percentage of these vitamins would be saved.

Average values for the four vitamins in the diets of the families in the two counties and distributions of individual family diets are shown after adjustment for cooking loss in table 40. They indicate that in the diets of these families losses due to cooking were probably not important for riboflavin but were very important for ascorbic acid. With adjustment for cooking loss, ascorbic acid became the most limiting dietary essential in the diets of families in both counties.

Table 40.—Values for 4 vitamins after adjustment for cooking losses, averages and distributions, open-country families in a Georgia county and an Ohio county, early summer 1945

				6		After adjustment for cookin			fter ad	iustme	After adjustment for cooking loss	cookin	lose I								1
Location, occupation, race, and farm	A vera per day	ge vita	Average vitamin values per nutrition unit per day	alues t per			Diet	Diets furnishing vitamins within specified milligrams per nutrition unit per day	shing v	ritamir	ns with	in spec	ified m	illigraı	ns per	nutriti	on uni	t per d	ay		
tenure	A SCOF-	Į.					Aseorb	Aseorbic aeid			Thiamine	nine			Riboflavin	avin			Niacin	ii	
	bie acid		Ribo- Nia- flavin cin	cin i	All	75 or more	50-74	25-49	24 or less	1,50 or more	1.00-	0.50-	0.49 or 2.00 or less more		1.34-	0.66- 0	0.65 or 15.0 or less more	5.0 or more	10.0-	5.0- 9.9	4.9 or less
COUNTY IN GEORGIA All families.	Milli- Milli- Milli- Milli- grams grams grams grams grams grams	Milli- grams 2.4	Milli- grams 2.1	Milli- grams 19	Per- cent 100	Per- cent 39	Per- cent 24	Per- cent 28	Per- cent	Per- cent 87	Per- cent 11	Per- cent	Per- cent 0	Per- cent 51	Per- cent 31	Per- cent 17	Per- cent	Per- cent 76	Per- cent 19	Per- cent 5	Per- cent
Farm families: White	76	2.6	2.4	21	100	54	25	21	0	94	52	-	0	67	24	6	0	68	10	1	0
Owners, renters	28	25.2	2.7	88	55	45	88	32	08	96	၈၀	-0	00	48 48	17	14	0	91	8 14	-0	00
Negro	22	2.2	1.9	17	100	31	18	34	17	82	15	en	0	41	32	22	2	65	56	6	0
Owners, renters	£ &	2.5	2.2	181	100	36	24	98	023	94	212	- 10	00	54 32	35.88	30	- 60	63	26 26	10	01
Nonfarm families	26	2.2	1.8	19	100	30	43	31	9	84	15	П	0	35	20	13	63	73	23	4	0
COUNTY IN OHIO All families.	80	2.0	2.7	18	100	52	21	20	7	72	21	7	0	74	21	5	0	92	56	22	1
Farm families	63	2.0	25.8	18	100	53	22 17	19	20	73	21 25	111	0-	57	28	16	10	68	42	5.5	04

1 Adjusted by factors based on average food consumption of families surveyed and usual cooking practices in the United States.

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